

**Headquarters, U.S.  
Marine Corps**

**MCO P5090.2A  
PCN 10207187100**



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# **ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL**

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DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
3000 MARINE CORPS PENTAGON  
WASHINGTON, DC 20350-3000

MCO P5090.2A Ch.3  
GF-5

AUG 26 2013

MARINE CORPS ORDER P5090.2A Ch3

From: Commandant of the Marine Corps  
To: Distribution List

Subj: ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

Encl: (1) Revised chapters and appendices and  
new appendices to MCO P5090.2

1. Situation. To transmit revised chapters and appendices, remove nine appendices, separate appendices that were previously combined, and add four new appendices to the basic Order.

2. Execution

- a. Update the overall table of contents, page ii.
- b. Update the Reports Required, page v.
- c. Update chapters 1 through 21.
- d. Remove appendices A through S. Replace with corresponding appendices A through T in enclosure (1) which includes new appendices A, E, H, and K.

3. Summary of Changes. This revision updates Marine Corps policy on environmental compliance and protection. This revision removes nine appendices that were excerpts of Department of Defense Directives. The revision also adds appendices on requirements for overseas environmental compliance, guidance for the environmental management site usage on the Environmental Management Portal, TEAM Guide training requirements, and identification of other than operational ranges.

4. Filing Instructions. File this change transmittal page in front of the original Order.

W. M. FAULKNER  
Deputy Commandant for  
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MCO P5090.2A Ch 2  
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MARINE CORPS ORDER P5090.2A Ch 2

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Encl: (1) Revised chapters and appendices and a  
new appendix to MCO P5090.2A

1. Situation. To transmit revised chapters and appendices and add one new appendix to the basic Order.

2. Execution

a. Remove the overall table of contents, page ii. Replace it with the corresponding page ii in enclosure (1).

b. Remove chapters 3, 6 through 9, 12, 14 through 17, and 19. Replace with corresponding chapters 3, 6 through 9, 12, 14 through 17, and 19 in enclosure (1).

c. Remove appendices E and F. Replace with corresponding appendices E and F in enclosure (1).

d. Add appendix S.

3. Summary of Changes. This change updates Marine Corps policy on environmental compliance and protection. This change also adds a procedure for implementing a waiver for the use of Defense Reutilization and Marketing Services.

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A handwritten signature in black ink, appearing to read 'E. G. USHER, III', written in a cursive style.

E. G. USHER, III  
Deputy Commandant for  
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MCO P5090.2A Ch1  
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22 JAN 2008

MARINE CORPS ORDER P5090.2A CH 1

From: Commandant of the Marine Corps  
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Subj: ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL  
CHANGE 1

Encl: (1) Revised chapters and appendices, a new chapter,  
and a new appendix to MCO P5090.2A

1. Situation. To transmit revised chapters and appendices, one new chapter and one new appendix to the basic Order.

2. Mission. This change updates Marine Corps policy on environmental compliance and protection. This change also adds policy and responsibilities for managing military waste munitions.

3. Execution

a. Remove the overall table of contents, page iii. Replace it with the corresponding page ii in enclosure (1).

b. Remove the Reports Required, page vii. Replace it with the corresponding Reports Required, page 6, in enclosure (1).

c. Remove chapters 1-5. Replace with corresponding chapters 1-5 in enclosure (1).

d. Remove chapters 11-12. Replace with corresponding chapters 11-12 in enclosure (1).

e. Add chapter 21.

f. Remove appendices A-D. Replace with corresponding appendices A-D in enclosure (1).

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g. Add appendix R.

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E. G. USHER III  
Deputy Commandant for  
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DEPARTMENT OF THE NAVY  
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WASHINGTON, DC 20380-1775

MCO P5090.2A  
LFL  
10 JUL 98

MARINE CORPS ORDER P5090.2A W/CH 1-2

From: Commandant of the Marine Corps  
To: Distribution List

Subj: ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL

Encl: (1) LOCATOR SHEET

Reports Required: List, page v

1. Purpose. American society has shown a determined concern for the protection and enhancement of the environment. As a result, the Secretary of Defense has made the commitment that the Department of Defense (DoD) will take the lead in Federal agency environmental compliance and protection. Military leaders are expected to conform to a new national ethic and to consider a new set of priorities which have been superimposed on our traditional defense mission. Consistent with this objective, this Manual has been revised to provide guidance and instruction to installations enabling them to meet stringent environmental legislation and increasing pressure by regulatory agencies at the Federal, state, and local level.

2. Cancellation. MCO P5090.2

3. Effective Date. 1 July 1998

4. Summary of Revision. Revisions are considerable, and this Manual should be reviewed in its entirety.

5. Scope. This Manual accomplishes the following:

- a. Implements the substantive requirements of DoD environmental policy;
- b. Outlines the requirements for compliance with Federal environmental regulations;
- c. Establishes Marine Corps policy for funding, evaluating, and continually improving environmental compliance and protection programs, with emphasis on pollution prevention and training and education.

MCO P5090.2A  
10 JUL 98

6. Recommendations for Modification. Recommendations concerning the contents of this Manual are invited. Such recommendations will be forwarded to the Commandant of the Marine Corps (CMC) (LFL) via the appropriate chain of command.

7. Action. All Commanding Officers and Marines whose actions have the potential to adversely affect the environment should ensure that they are familiar with the applicable chapters of this Manual.

8. Reserve Applicability. This Manual is applicable to the Marine Corps Reserve.

9. Certification. Reviewed and approved this date.

  
J. M. HAYES  
Acting Deputy Chief of Staff  
for Installations and Logistics

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LOCATOR SHEET

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Location: \_\_\_\_\_  
(Indicate the location(s) of the copies(ies) of the Order.)

ENCLOSURE (1)

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change
1	1/22/08		
2	5/21/09		

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CHAPTER 1

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## CHAPTER 1

### GENERAL POLICIES AND RESPONSIBILITIES

#### SECTION 1: INTRODUCTION

##### 1100. PURPOSE

1. This Manual sets forth Marine Corps policies and responsibilities for compliance with environmental statutes and regulations, as well as the management of Marine Corps environmental programs.
2. Marine Corps environmental programs ensure compliance with environmental requirements, protect the environment and human health, and enhance and sustain mission readiness. The programs focus on the following elements:
  - a. Compliance with environmental requirements.
  - b. Pollution prevention (P2).
  - c. Conservation of natural and cultural resources.
  - d. Environmental restoration (ER).
3. Headquarters Marine Corps Installation and Logistics (I&L) Department, Facilities and Services Division (LF), executes and provides oversight on Marine Corps environmental programs and develops environmental policy.
4. This chapter establishes a framework and general responsibilities for management of Marine Corps environmental programs.

##### 1101. APPLICABILITY

1. This Manual applies to all Marine Corps active and Reserve installations, Commands, detachments, components, and where applicable, Marine Corps activities in foreign countries. Appendix A summarizes the applicability of environmental requirements to Marine Corps activities overseas.

##### 1102. BACKGROUND

1. The Marine Corps holds military lands in the public trust, and Marine Corps commands must maintain land, air, and water resources to sustain realistic military training and testing. Failure to achieve environmental compliance and protect our natural resources may compromise the mission by limiting Marine Corps access to areas necessary to sustain military readiness.
2. Marine Corps environmental programs preserve training areas, enhance operational readiness, protect public health, and preserve the environmental quality of the installation and adjacent communities. Environmental programs also strengthen Marine Corps relationships with the public and the regulatory agencies that implement Federal environmental laws.

3. The evolution of the Marine Corps environmental programs began in the early 1990s with initiatives to conserve natural resources and expanded into restoration efforts to clean up past environmental contamination. As environmental requirements rapidly grew, Marine Corps environmental programs became heavily focused on compliance with Federal, state, and local laws and regulations. By mid to late 1990s, Marine Corps policies emphasized proactive measures to prevent pollution and complement/enhance existing environmental programs.

4. The Marine Corps' overall vision for environmental stewardship is based on the four foundational pillars of Conservation, Restoration, Compliance, and P2. Prudent management of natural and cultural resources, clean up of past environmental contamination, compliance with environmental requirements, and prevention/minimization of pollutants all help to ensure the sustainability of Marine Corps mission readiness.

5. The Marine Corps uses the Environmental Management System (EMS) as a tool to systematically integrate environmental considerations into planning processes across all functional areas. EMS will also be used as the framework for implementing environmental components of sustainability initiatives, goals, and objectives. Chapter 2 of this Manual summarizes the EMS process and Marine Corps EMS policies.

#### 1103. REQUIREMENTS

##### 1. General

a. This Manual summarizes Federal and Department of Defense (DOD) environmental requirements applicable to the Marine Corps, including Executive Orders (E.O.s), Federal laws, Federal implementing regulations, and DOD policies. Additionally, this Manual identifies Department of Navy (DON) and Marine Corps policies developed to implement Federal and DOD environmental requirements.

b. State and local governments may also stipulate environmental program requirements that are more stringent than Federal requirements. Although specific state/local environmental requirements are not included in this Manual, installations are responsible for identifying and complying with all applicable requirements.

c. Each chapter in this Manual refers to specific E.O.s, Federal environmental statutes, regulations, and policies related to environmental compliance, P2, ER, and natural/cultural resources conservation and preservation. Compliance with these requirements along with good stewardship help to ensure a sustainable Marine Corps.

d. The applicability of environmental requirements to Marine Corps activities in foreign countries is discussed in paragraph 1101 and appendix A of this Manual.

##### 2. Federal Requirements

a. Statutory Requirements. Federal environmental statutes are laws that generally require compliance by DOD installations. (See appendix B for a

summary of applicable Federal statutes.) State and local governments often implement programs based on Federal environmental law, and these programs often apply to DOD installations by virtue of Federal waivers from sovereign immunity.

b. Regulatory Requirements. Federal environmental regulations implement Federal environmental statutes. These regulatory requirements often establish minimum standards for state and local governments' implementing programs. (See appendix B for a summary of Codes of Federal Regulations (CFRs)).

c. E.O. Requirements

(1) E.O. 12088. Reference (a). Requires all facilities owned by or leased to or by the military to be designed, operated, and maintained in compliance with all applicable environmental standards. Reference (a) also requires each agency to submit to the Office of Management and Budget an annual plan for environmental pollution control with cost estimates for the design, construction, management, operation, and maintenance of Federal facilities. Military and civilian personnel must cooperate with Federal, state, and local environmental protection agencies and comply with applicable standards and criteria issued by these agencies to the extent permitted by law. Reference (a) was revoked in part (section 1-4) by reference (b).

(2) E.O. 13148, "Greening the Government Through Leadership in Environmental Management," April 21, 2000. Reference (b). Required Federal facilities to implement EMS by 31 December 2005. Reference (c) later revoked reference (b) in January 2007.

(3) E.O. 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007. Reference (c). Requires Federal agencies to conduct their environmental, transportation, and energy-related activities in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner. Reference (c) also establishes the EMS as the primary management approach and reporting mechanism for communicating progress on meeting the performance goals per this reference.

(4) E.O. 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," October 5, 2009. Reference (d). Expands on Federal agency energy reduction and environmental performance requirements identified in reference (c). The primary goal of reference (d) is to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of greenhouse gas (GHG) emissions a priority for Federal agencies. Reference (d) requires DOD to develop and annually update a Strategic Sustainability Performance Plan (SSPP) that lays out how targets and performance goals per reference (d) will be accomplished.

(5) In addition to references (a) through (d), other E.O.s stipulate environmental requirements for Federal agencies. (See appendix B for a summary of applicable E.O.s.)

3. DOD Requirements. DOD environmental policies are generally issued via DOD Instructions and Directives. Additionally, reference (e) outlines DOD's strategy for meeting environmental and energy sustainability requirements under reference (d).

4. DON Requirements. Certain DON requirements, such as those published by the Office of the Assistant Secretary of the Navy for Energy, Installations and Environment (OASN (E,I&E)) apply to both Navy and Marine Corps activities and installations.

5. Marine Corps Requirements. The Commandant of the Marine Corps (CMC) establishes Marine Corps environmental compliance and protection requirements through this Manual. In addition, the CMC may periodically provide other policies and guidance through letters, memoranda, and messages.

1104. TERMS AND DEFINITIONS. General terms under this chapter are defined below. Additionally, individual chapters include specific terms and definitions.

1. Compliance. The state of meeting all applicable environmental requirements, including E.O.s; Federal legislation and regulations; state or local requirements; DOD, DON, and Marine Corps policies; or other governing bodies.

2. Conservation. The wise use and sound management of natural and cultural resources according to principles that provide optimum public benefit, continued productivity and sustainability for present and future generations, and support of the military mission.

3. Cultural Resources. Buildings, structures, districts, sites, and objects of significance in history, architecture, archaeology, engineering, or culture.

4. Enforcement Action (EA). A formal, written notification by the United States (U.S.) Environmental Protection Agency (EPA) or other authorized Federal, state, inter-state, regional or local environmental regulatory agency of violation of any applicable statutory or regulatory requirement.

5. Environment. Surroundings to include the navigable waters, waters of the contiguous zone, ocean waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface area, or ambient air within the United States or under the jurisdiction of the United States, including man-made structures, indoor air environments, natural resources, and archeological and cultural resources.

6. Environmental Management Hierarchy (EMH). As established under reference (f), the hierarchy for environmental management is as follows:

a. Pollution should be prevented or reduced at the source whenever possible.

b. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible.

c. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible.

d. Disposal or other release into the environment should be used as a last resort and should be conducted in an environmentally safe manner.

7. EMS. A systematic approach for integrating environmental considerations and accountability into day-to-day decision-making and long-term planning processes across all missions, activities, and functions. An EMS institutionalizes processes for continual environmental improvement and reduced risks to mission through ongoing planning, review, and preventive or corrective action.

8. Environmental Pollution. The conditions resulting from the presence of chemical, physical, or biological agents or causes which alter the natural environment, adversely affecting human health or the quality of life, biosystems, structures and equipment, recreational opportunities, or natural beauty.

9. Environmental Requirement. A defined standard pertaining to environmental compliance, P2, or natural/cultural resources, subject to uniform application. Environmental requirements may be in the form of a law, regulation, E.O., policy, ordinance, permit, or other form that prescribes a standard.

10. Environmental Stewardship. Management and oversight of natural and cultural resources in a manner that minimizes adverse effects on and also preserves and enhances the intrinsic value of those resources for present and future generations.

11. Environmentally Preferable. Products or services having a lesser or reduced effect on human health and the environment when compared with competing products or services serving the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or product or service disposal.

12. Government-Owned, Contractor-Operated (GOCO) Plants/Facilities. A separate category of government-owned real property not residing on, or under the jurisdiction of, government-owned and controlled real property, such as military installations and bases. GOCO facilities consist of government-owned and controlled real property that are jurisdictionally separated from and dedicated to a contractor operation under contract.

13. Installation. Base, camp, post, station, yard, center, or other activity owned and operated by and/or for the Marine Corps (or other DOD service). This includes any leased facility where Marine Corps activities have real property maintenance requirements. Military departments or DOD activities that are located within the confines of another installation and occupying portions of the land, buildings, structures of the main installation are considered to be tenants. Overseas installations are defined as permanent, base force structure facilities under the operational control of the Secretary of a military department or the DOD that is located outside the United States and outside any territory, commonwealth or possession of the United States. Installations overseas do NOT include temporary, contingency operation or deployment support facilities.

14. National Environmental Policy Act (NEPA). U.S. statute that requires all Federal agencies to consider the potential effects of proposed actions on the human and natural environment.

15. Natural Resources. Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the U.S., any state or local government, any foreign government, or any Indian tribe. There are five groups of natural resources: surface water, ground water, air, geologic, and biological.

16. Operational Readiness. The umbrella term and supporting program that encompasses all the resources required of a unit to maintain readiness standards.

17. Overseas. Outside any territory, possession or commonwealth of the United States. This does not include contingency operations, training deployments, or the operations of military vessels and aircraft.

18. P2. Use of processes, materials, or products that avoid, reduce, or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

19. Restoration. The act or process of accurately recovering the form and details of a property or resource to its condition and appearance at a previous point in time.

20. Sustainable Acquisition. DOD policy (reference (g)) defines sustainable acquisition or "Green Procurement" (GP) as the "purchase of environmentally preferable products and services in accordance with Federally-mandated 'green' procurement preference programs." GP includes the acquisition of recycled content products, environmentally preferable products and services, biobased products, energy and water efficient products, alternative fuel vehicles (AFVs) and alternative fuels, products using renewable energy, and alternatives to hazardous or toxic chemicals.

21. Tenant. An authorized activity located on an installation that is not part of the host organization.

1105. MANUAL FORMAT. This Manual presents overall policy and program management in the opening five chapters, followed by 16 programmatic chapters addressing specific environmental topics and related technical issues. Each chapter is broadly divided into three parts: Section 1: Introduction, Section 2: Marine Corps Policy, and Section 3: Responsibilities. References are located at the end of each chapter.

1. Section 1: Introduction. Section 1 consists of the following components:

- a. Purpose. The purpose explains why the chapter exists.
- b. Applicability. The applicability identifies to whom the chapter applies.
- c. Background. The background addresses why the Marine Corps is

implementing these policies and discusses historic items in relation to the chapter's subject.

d. Federal Statutes. This component describes Federal legislation applicable to the chapter's subject.

e. Requirements. This component explains how legislative and other requirements apply to the chapter's subject.

f. Terms and Definitions. This component describes terms and definitions designed to meet each chapter's subject matter.

2. Section 2: Policy. Section 2 provides Marine Corps policies for each chapter's subject.

3. Section 3: Responsibilities. Section 3 identifies the responsibilities for any environmental requirements identified within each chapter.

4. Appendices. Appendices are provided at the end of the Manual.

CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

SECTION 2: MARINE CORPS POLICY

1200. MARINE CORPS ENVIRONMENTAL POLICY. The United States Marine Corps is committed to mission accomplishment and to environmental protection. Minimizing adverse environmental impacts helps the Marine Corps to be a good steward, win hearts and minds, and sustain its combat capability into the future. The Marine Corps is committed to protecting the health and integrity of the environment, both at home and abroad, complying with the Nation's laws, conserving our natural resources and national treasures, preventing pollution through best management practices (BMPs) consistent with mission requirements, and ER consistent with mission objectives. The Marine Corps shall continue to refine environmental management programs, proactively mitigate environmental and health risks, and ensure individuals are appropriately trained and empowered to provide stewardship of the lands to which the Marine Corps is entrusted.

1201. GENERAL. The Marine Corps recognizes the importance of sustaining a clean, healthy environment to train and work that directly supports mission readiness and promotes community confidence in environmental stewardship efforts. By respecting and maintaining the natural resources entrusted to the Marine Corps, the training opportunities enjoyed by today's Marines will be available to future Marines. Complete and successful implementation of the policies herein will optimize the Marine Corps' ability to provide and maintain the natural resources, facilities, and training areas necessary to ensure mission sustainability. All Marine Corps installations and activities will ensure that this policy is implemented and communicated to all military and civilian employees and supporting contractors.

1202. COMPLIANCE. All Marine Corps' civilian and military personnel, installation tenants, and contractors shall comply with applicable Federal, state, and local environmental laws, regulations, and E.O.s; DOD and Marine Corps' environmental policies; and where applicable, overseas environmental requirements (see appendix A).

1203. POLLUTION PREVENTION (P2). The Marine Corps will minimize resource consumption and eliminate waste generation, where practical, when planning, designing, manufacturing or constructing, maintaining, sustaining, and disposing of facilities, weapon systems, and equipment. Marine Corps facilities shall also eliminate or minimize the use of hazardous materials (HM) and the generation of hazardous waste (HW), where practicable. When assessing environmental compliance alternatives, installations and commands shall employ the EMH, as established by reference (f) in the following order of preference:

1. Source reduction.
2. Reuse.
3. Recycling.

4. Treatment.

5. Disposal.

1204. ENVIRONMENTAL MANAGEMENT SYSTEM (EMS). Marine Corps installations shall use the Marine Corps EMS as the framework to ensure environmental compliance, meet environmental management objectives, and help sustain entrusted environmental resources. Chapter 2 of this Manual provides specific Marine Corps EMS policy requirements.

1205. ENVIRONMENTAL COMPLIANCE EVALUATIONS (ECEs). Marine Corps installations shall perform ECEs in accordance with chapter 4 of this Manual.

1206. NEPA REQUIREMENTS. Marine Corps shall consider the environmental consequences of all proposed actions and comply with the appropriate U.S. or host nation environmental review process (e.g., references (h) and (i)).

1207. SUSTAINABILITY

1. The Marine Corps will promote sustainable practices that go beyond environmental compliance. By employing sustainable practices, the Marine Corps will:

a. Improve mission effectiveness while enhancing the environment.

b. Minimize impacts and total ownership costs of Marine Corps systems, materiel, facilities, and operations.

c. Strengthen operational capability by reducing environmental footprint.

2. Marine Corps installations and facilities shall integrate environmental stewardship into all planning activities and leverage the necessary resources to accomplish sustainability goals and objectives.

3. The Marine Corps will develop, implement, and manage a Marine Corps sustainability plan that supports DOD SSPP and targets and performance goals per reference (d).

4. The Marine Corps shall employ sustainable acquisition for products and services where feasible. In cases where "green" products or services are not available competitively, not economically justifiable, not available within a reasonable time frame, and/or do not meet appropriate performance standards or functional requirements, Marine Corps activities shall provide appropriate documentation.

5. Marine Corps installations and facilities shall consider life-cycle assessments to evaluate the impacts associated with the sourcing, manufacture, distribution, end use, and disposal of a material or system.

6. The Marine Corps EMS is the preferred management tool for ensuring that environmental components of sustainability performance objectives and targets are effectively established and met.

1208. PERSONAL LIABILITY FOR VIOLATION OF ENVIRONMENTAL LAWS. In most civil lawsuits, Federal civilian employees and service members are named as

defendants in their official capacities because the actions giving rise to the lawsuits are undertaken in the line of duty or within the scope of their employment. These cases generally proceed without risk of personal liability for the employees involved. In some cases, however, civilian employees or service members may be sued in their individual capacities for injury or damage to persons or property. In these cases, where individuals violate environmental laws and subsequently injure or damage persons or property as a result of actions taken out of the line of duty or beyond the scope of their employment (e.g., reckless, knowing, or purposeful violation) they may be personally liable and may be responsible for paying any damages awarded. This civil liability is in addition to potential criminal prosecution.

### 1. Personal Liability for Injuries or Damages to Persons or Property

a. Where a Federal civilian employee's or service member's actions injure or damage another's person or property, the injured party may file a civil lawsuit to recover the cost of the damage. In such cases, the Department of Justice (DOJ) may substitute the United States for the civilian employee or service member if it determines that the individual was acting within the line of duty or within the scope of their employment and such action is in the interest of the United States. An individual properly exercising official authority to carry out command business per applicable Marine Corps regulations is acting in the line of duty or within the scope of their employment.

b. Any Federal civilian employee or service member who is served with a complaint, subpoena, or other legal paper relating to activities undertaken pursuant to official duties must immediately report this information to their staff judge advocate, command counsel, legal officer, and Commanding Officer (CO) for guidance on how to proceed. Additional guidance is available in reference (j) and from the Counsel for the Commandant of the Marine Corps (CMC (CL)) and its regional offices.

2. Civil Liability for Fines. Many environmental laws provide for civil penalties (e.g., fines) for violations of environmental requirements. Many statutes, such as references (k), (l), and (m) provide varying degrees of immunity from civil penalties to individual Federal civilian employees and service members acting in the line of duty or within the scope of their employment.

### 3. Criminal Liability

a. Some environmental laws provide for criminal prosecution for knowing or purposeful violations. However, some environmental laws also provide for criminal prosecution for negligent violations. Federal civilian employees and military personnel may be subject to criminal prosecution if their actions or inactions violate environmental laws subject to criminal enforcement.

b. Federal civilian employees and service members must seek out and remedy environmental violations under their cognizance and implement measures to ensure that future violations do not occur. For supervisors, criminal liability may not necessarily depend on personal participation in the crime.

c. As a general rule, violations of criminal law require a criminal "state of mind" (i.e., a knowing or purposeful act). However, the Supreme Court has held that "where dangerous or noxious waste materials are involved, the probability of regulation is so great that anyone who is aware that he is in possession of them must be presumed to be aware of the regulations." In other words, "ignorance of the law is no excuse."

#### 4. Legal Representation in Criminal Cases

a. The DOJ may represent a Federal civilian employee or service member prosecuted in state or Federal court for criminal violations of environmental law. However, such representation is contingent upon DOJ finding that the individual acted in the line of duty or within the scope of their employment regarding the alleged misconduct and representation is in the interest of the United States.

b. If a Federal civilian employee or service member is convicted of a crime, the civilian employee or service member is personally responsible for paying any fine adjudged, regardless of whether the DOJ provided representation.

1209. CONSISTENCY. To ensure consistent environmental compliance and avoid adverse precedents, particularly those with mission and funding implications, responsible commands must coordinate with CMC (LF) regarding permit requirements, payments of fines/fees/penalties/supplemental environmental projects from Marine Corps funds, compliance agreements, settlements, and responses to Notices of Violation. Legal and technical assistance is available from the installation and regional legal counsel and environmental offices. Naval Facilities Engineering Command (NAVFAC) and supporting activities and commands are also available to respond to requests for technical assistance.

1210. RESEARCH, DEVELOPMENT, TESTING, AND EVALUATION (RDT&E). Environmental RDT&E may be initiated, where applicable and necessary, to meet existing and anticipated environmental requirements provided that such RDT&E has not been undertaken by other DOD Components or private industry. Since environmental requirements are not usually narrowly focused, every effort should be taken to leverage existing RDT&E to avoid unnecessarily depleting scarce resources. Environmental RDT&E planned to be undertaken shall be reported to the CMC (LF); Marine Corps Systems Command; and the Office of the Director of Defense Research and Engineering, Washington, DC 20301-3010.

#### 1211. ENVIRONMENTAL INFORMATION TECHNOLOGY AND SERVICES (EIT&S)

1. All Marine Corps Forces, Regions, and Installations shall ensure that EIT&S is managed in accordance with references (n), (o), and other applicable Marine Corps Information Technology policies. EIT&S is the data, people, hardware, software, procedures, and policies required to perform environmental management support functions.

2. Each Marine Corps Force, Region, and installation shall participate in the working group chartered by CMC (LF) to establish broad program goals, objectives and priorities, and coordinate, review, approve/disapprove configuration enhancements/changes to the Marine Corps Environmental Applications and Systems Enterprise (MCEASE). MCEASE is an information

technology framework in support of EIT&S. This framework is a combination of computerized tools used to input, edit, store, retrieve, manage, analyze, and present environmental information.

1212. GOCO FACILITIES. Marine Corps installations and/or Commands responsible for GOCO facilities must oversee GOCO facility use or management contracts to ensure that contractors comply with applicable DOD, Marine Corps, Federal, and state environmental policies and requirements, including sustainable acquisition, waste reduction, and energy efficiency requirements. To ensure environmental compliance, GOCO facility use and management contracts shall require each contractor to participate in the Marine Corps ECE Program and the installation's EMS. Marine Corps installations and/or Commands should also encourage GOCO facilities to incorporate the EMH into project planning, design, and execution, where feasible. Any new contract, contract modification, or task order issued after the effective date of an applicable DOD, Marine Corps, Federal, or state environmental policy or requirement (to include sustainable acquisition, waste reduction, and energy efficiency) must incorporate contractual language that ensures compliance with such policy or requirement. Installation environmental staff shall be consulted beginning in the early stages of contract development and during contract review to ensure contractor compliance with environmental requirements.

1213. GRANTEE AND CONTRACTOR OPERATIONS AND FACILITY USE. By virtue of lease or contract terms, cognizant installations shall ensure that:

1. The operations and facilities of grantees and independent contractors comply with, and conform to, all applicable DOD, Marine Corps, Federal, and state environmental policies and requirements, including sustainable acquisition, waste reduction, and energy efficiency.

2. Grantees and independent contractors advise the installation or unit of their environmental compliance permits (e.g., the National Pollutant Discharge Elimination System (NPDES)) and their conditions; provide the installation or unit with periodic environmental compliance reports (i.e., audit findings); participate in the Marine Corps ECE Program; and incorporate the EMH into project planning, design, and execution, where feasible.

3. Per paragraph 2207.2, contractors and grantees shall participate in the host installation EMS and host EMS audits. Contractors and grantees shall inform the installation Environmental Office of any significant practices and aspects that they operate, and shall implement controls for these practices and aspects, as appropriate.

4. New contracts, contract modifications, and task orders issued after the effective date of an applicable DOD, Marine Corps, Federal, or state environmental policy or requirement (to include sustainable acquisition, waste reduction, and energy efficiency) must incorporate contractual language that ensures compliance with such policy or requirement. Installation environmental staff shall be included during the early stages of contract development to review contracts and ensure contractor compliance with environmental requirements.

1214. OUTLEASE RELATIONSHIPS

1. Federal law under reference (p) authorizes the Secretary of a military department to lease to non-Federal entities, non-excess Federal land that is not currently needed for public use. This practice establishes a traditional landlord-tenant relationship between the Federal Government and the grantee.

2. Marine Corps installations shall ensure that outlease relationships clearly convey environmental responsibilities to the lessee for which the installation commander is ultimately responsible.

3. Marine Corps installations may be held responsible for a grantee's environmental noncompliance. Therefore, installations should:

a. Ensure lease terms require grantees to comply with any applicable Federal, state, and local environmental laws and the environmental and land use requirements specifically applicable to Federal agencies with respect to the leased property, such as:

(1) Complying with reference (q).

(2) Avoiding actions that would jeopardize the survival of Federally-listed endangered or threatened species, and consulting with the United States Fish and Wildlife Service (USFWS) concerning actions that may affect endangered or threatened species.

(3) Complying with E.O.s.

(4) Consulting with the appropriate state historic preservation officer concerning actions that may affect resources listed or determined eligible for listing on the National Register of Historic Places (NRHP).

b. Work with the local NAVFAC Engineering Field Division/Engineering Field Activity and CMC (LF) to ensure that all leases on the installation are periodically inspected and lease terms are enforced.

c. Ensure the installation's ECE program (see Chapter 4 of this Manual) audits grantees.

d. Ensure current and future installation orders regulate grantee environmental and land use activities.

e. Designate installation staff responsible for overseeing grantee environmental and land-use compliance.

f. Document grantee environmental compliance inspections.

g. Ensure the installation considers the grantee's operations when implementing the EMS.

4. Reference (r) regulates DON real estate transactions, including leases. Though the Manual generally requires regular and periodic inspections of leased property by NAVFAC real estate specialists and DON natural resource professionals, the installation commander must ensure that the inspections are conducted.

CHAPTER 1

GENERAL POLICIES AND RESPONSIBILITIES

SECTION 3: RESPONSIBILITIES

1300. CMC (LF)/COMMANDER MARINE CORPS INSTALLATIONS COMMAND (MCICOM)

1. Periodically update this Manual.
2. Support Marine Corps installations and units with implementation and compliance with the policies of this Manual.
3. Support CMC (I&L) with the development and implementation of a Marine Corps Sustainability Plan.
4. Promote cross-functional integration at Headquarters, Marine Corps (HQMC) and at installations for accomplishing environmental program management and sustainability goals.
5. Develop additional environmental policies and implementing guidance, as appropriate.
6. Coordinate environmental compliance and protection issues with DOD environmental Executive Agents, DOD Regional Environmental Coordinators (RECs), Component RECs, Marine Corps installations and units, and counsel.
7. Appoint Marine Corps Component REC for each of the EPA Regions III, IV, and IX.
8. Conduct HQMC-sponsored EMS and ECE audits at each installation on a triennial basis and ensure that installations conduct self-audits at least annually.
9. Develop and update budget guidance to implement chapter 3 of this Manual and support installations with programming requirements and obtaining necessary funding to comply with environmental requirements. Prioritize and fund high-risk environmental priorities, as identified by Regions and installations. Notify leadership, in writing, of unacceptable risks due to lack of funds.
10. In consultation with Regional Commands, create environmental program efficiencies by collectively funding studies and coordinating common training programs, as practicable.

1301. CMC (LB). Ensure all environmental procurement requirements are included in contracts and purchasing guidelines. Inspect those requirements during financial auditing.

1302. MARINE CORPS COMPONENT REGIONAL ENVIRONMENTAL COORDINATORS (RECS). Marine Corps Component RECs shall:

1. In consultation with the Executive Agents and affected Component RECs,

coordinate the consistent interpretation and application of DOD environmental policies within Regions III, IV, and IX.

2. Monitor state and regional proposed environmental legislation and regulations for their potential impact on the Marine Corps.
3. Coordinate with potentially affected installations and units to assess potential impacts.
4. Coordinate with the DOD REC, CMC (LF), and counsel to present Marine Corps positions regarding proposed state/regional environmental legislation and regulations.
5. Provide CMC (LF) and the DOD REC semi-annual executive summaries of Marine Corps REC activities, success stories, and issues.

1303. COMMANDING GENERALS (CG) OF MARINE CORPS INSTALLATIONS (MCI) EAST, WEST, AND PACIFIC

1. Provide environmental policy and program management, guidance, coordination, and implementation strategies.
2. Promote sustainability and support installation sustainability initiatives.
3. Provide environmental compliance oversight and evaluations of installation program implementation to monitor and sustain Marine Corps environmental program objectives.
4. Provide primary environmental regulatory interface for issues that have implications beyond a single installation.
5. Establish and oversee regional NEPA policy and processes to ensure consistent application. Support HQMC NEPA documentation reviews and approval process requirements.
6. Implement the regional EMS strategies and guidance and identify regional priorities to address environmental risks.
7. Oversee the regional environmental Program Objective Memorandum (POM) and Fiscal Year resourcing and execution; review and prioritize environmental resource allocations and POM submittals.
8. Monitor and manage environmental encroachment factors and facilitate encroachment partnering relationships and agreements.
9. Identify and promote opportunities for regional environmental initiatives and contracting support to gain efficiencies. Create environmental program efficiencies by collectively funding studies, coordinating common training programs, developing appropriate Memorandums of Agreement between stakeholders (e.g., USMC Training and Education Command (TECOM) bases, Marine Aircraft Wings, Resident Officer In Charge of Construction offices, etc.) and the Region, and facilitating mutual support between installations as practicable.

1304. COMMANDERS OF MARINE FORCES AND INSTALLATIONS

1. The Installation Commander is the primary steward of all installation natural resources. This stewardship role includes the oversight of activities, whether Federal or non-Federal, that may degrade the environment and the installation's natural resources. As such, the Installation Commander shall serve as the Federal officer charged with ultimate and day-to-day responsibility for compliance with environmental requirements at their installation

2. Installation Commanders shall ensure that all personnel (military and civilian), tenants, units, contractors of GOCO and COCO facilities, independent contractors, and grantees of lease agreements comply with all applicable Federal, state and local, DOD, and Marine Corps environmental requirements.

3. The Commanders of MARFORRES, MARFORPAC, and MARFORCOM shall serve as the Federal officers charged with ultimate responsibility for their respective Command's compliance with applicable environmental requirements.

4. Commanders of Marine forces deployed to installations overseas must follow appendix A and comply with the Final Governing Standards (FGS) established for each respective host country. Commanders should also consult with their legal counsel to identify any unique environmental requirements of the host country.

5. Installation Commanders shall promote sustainability planning, facilitate cross-functional interaction, advocate sustainable practices, and promote life-cycle analyses.

6. Installation Commanders shall facilitate/support ECE and EMS planning and audits.

7. Installation Commanders shall support the NEPA planning process for all proposed actions on the installation that may have a negative or positive impact the environment.

8. Installation Commanders shall ensure that personnel are trained and aware of environmental requirements that apply to their respective duties.

9. Immediately after receiving an Enforcement Action or other notice of noncompliance, Installation Commanders shall report the noncompliance event to CMC (LF) in accordance with requirements under paragraph 2207.3(a) and appendix C of this Manual. Correct all compliance deficiencies in a timely manner.

10. Installation Commanders shall appropriately identify and program resource requirements for environmental compliance and environmental components of sustainability goals.

1305. COMMANDING OFFICERS (COs) OF MARINE CORPS UNITS AND TENANTS. COs of Marine Corps Units (Battalion/Squadron and above) and tenants assigned to Marine Corps installations shall:

1. Ensure their commands comply with all applicable Federal, state and local, DOD, and Marine Corps environmental requirements.
2. Commanders of units deployed to installations overseas must follow appendix A and comply with the FGS established for each respective host country (referenced in appendix A). Commanders should also consult with their legal counsel to identify any unique environmental requirements of the host country.
3. Ensure proper environmental training is provided for the members of the command (see chapter 5 of this Manual). Ensure sufficient numbers of Military Occupational Specialty (MOS) 8056 are present to properly manage unit HW.
4. Appoint a Unit Environmental Compliance Coordinator (ECC) (E-5 or above or other individual with sufficient authority to implement environmental requirements at each command) to ensure unit environmental training and environmental compliance requirements are met, and to coordinate with installation environmental staff, as required.
5. Seek assistance from installation environmental staff, as required.
6. Ensure that individuals performing environmental responsibilities are appropriately recognized for job performance in those areas.

1306. ALL MARINE CORPS PERSONNEL

1. Know and comply with the environmental rules and regulations that apply to their duties.
2. Maintain a general awareness of all applicable Marine Corps environmental policies and goals. Understand that the Marine Corps EMS is a way to systematically improve environmental compliance and protection. Each individual has an important role in reducing environmental risks.
3. Integrate environmentally safe and compliant procedures into all daily operational practices in order to minimize risk of adverse environmental and mission impacts.
4. Use conservation and P2 measures as the primary means of achieving and maintaining compliance with environmental requirements.
5. Know who is assigned as the unit's ECC.
6. Promptly elevate and report environmental issues and concerns to the proper authority.

REFERENCES

- (a) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (b) Executive Order 13148, "Greening the Government through Leadership in Environmental Management," April 21, 2000 (revoked)
- (c) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (d) Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," October 5, 2009
- (e) "DOD Strategic Sustainability Performance Plan, FY 2010 - FY 2020," June 2010
- (f) Public Law 101-508, "Pollution Prevention Control Act," November 6, 1990
- (g) DOD Memorandum, "Updated GP Program Strategy," December 2, 2008
- (h) 42 U.S.C. 4321
- (i) Executive Order 12114, "Environmental effects abroad of major Federal actions," January 4, 1979
- (j) JAGINST 5800.7E, "Manual of the Judge Advocate General," June 20, 2007
- (k) 42 U.S.C 7401-7671
- (l) 33 U.S.C 1251-1387
- (m) 42 U.S.C 300f-300j-26
- (n) DOD Directive 8000.01, "Management of DOD Information Enterprise," February 10, 2009
- (o) MARADMIN 226/04
- (p) 10 U.S.C 2667
- (q) 42 U.S.C 4321-4347
- (r) NAVFAC P-73, Chapter 19, "Real Estate Procedural Manual"

CHAPTER 2

MARINE CORPS ENVIRONMENTAL MANAGEMENT SYSTEM

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## CHAPTER 2

### MARINE CORPS ENVIRONMENTAL MANAGEMENT SYSTEM

#### SECTION 1: INTRODUCTION

2100. PURPOSE. This chapter establishes current Marine Corps policy and responsibilities for effective environmental program management through execution of the Marine Corps EMS. The goal of the Marine Corps EMS is to enable Marine Corps units, tenants, commands, installations, and regions to achieve and maintain environmental compliance and protection while sustaining resources essential to combat training and readiness. The USMC shall implement functional EMSs at all appropriate levels (installation, regional, and HQMC), continually improve in Marine Corps environmental compliance programs, and meet evolving E.O. and DOD policy requirements for mission sustainability.

#### 2101. APPLICABILITY

1. This chapter applies to all EMS-appropriate Marine Corps installations including active duty installations located within and outside the continental United States (CONUS/OCONUS) and MARFORRES Headquarters. HQMC annually submits a list of EMS-appropriate Marine Corps installations to the DOD. Organizational EMS requirements also apply to HQMC and regional commands.

2. All commands and tenant organizations on Marine Corps installations or other host facilities are stakeholders in the EMS. As such, they must proactively manage environmental risks by preventing and controlling the potential environmental impacts of their operations.

3. All EMS-appropriate overseas installations must adhere to the current Marine Corps policy and responsibilities for effective environmental program management through maintenance of the Marine Corps EMS as outlined in this chapter of this Manual [unless otherwise noted].

#### 2102. BACKGROUND

1. The Marine Corps EMS provides a systematic approach for integrating environmental considerations and accountability into day-to-day decision making and long-term planning processes across Marine Corps missions, activities, and functions. EMS provides commanders oversight of installation environmental responsibilities.

2. The Marine Corps EMS is built upon a framework of five interrelated components consisting of 17 elements. This framework is consistent with those used by other military services and Federal agencies, and with International Organization for Standardization's (ISO) 14001, an international standard for EMS. The Marine Corps EMS emphasizes continual improvement through effective policy, planning, implementation, checking and preventive or corrective action, and management review. Policy requirements in Section 2 of this chapter are organized around the 17 EMS elements. The five EMS components are:

a. Policy. The environmental policy is a public statement by senior leadership (at installation, regional, or HQMC levels) that, at a minimum, expresses commitment to environmental compliance, P2, and continual improvement of the installation's environmental performance.

b. Planning. Planning integrates environmental considerations into mission operations by identifying Federal, state, local, and DOD environmental requirements applicable to the installation's activities; identifying mission-supporting practices and their aspects and impacts; analyzing and prioritizing risks to mission posed by those practices; and developing objectives and targets (goals and metrics) to minimize risks to mission posed by those practices.

c. Implementation. The Marine Corps develops and documents roles and responsibilities for controlling mission-supporting practices and managing environmental resources to sustain and enhance the installation's mission.

d. Checking and Preventive or Corrective Action. This component ensures that the EMS actively measures and monitors performance, inspects for compliance, corrects deficiencies to address the root cause of problems, maintains proper records, and properly implements EMS requirements.

e. Management Review. This component includes the senior leadership review of EMS policy, planning, and implementation, followed by changes to one or more of these components, as appropriate.

3. The Marine Corps EMS was established in 2004 to meet requirements of reference (a). The EMS was modified in 2011 from an 18 element model to a 17 element model more closely aligned with the ISO 14001 standard. Marine Corps installations have successfully implemented EMSs conforming to required standards. They are recognizing benefits from improved environmental planning, streamlined communication and coordination across functional lines, heightened awareness of the environmental effects of operations, and improved environmental controls that protect both the environment and the base's mission-essential practices. Installations are encouraged to leverage efficiencies and cross-functional relationships established under the EMS to facilitate sustainable practices as required by references (b) through (d).

#### 2103. REQUIREMENTS

1. E.O. 13148. Reference (a). Required USMC installations to implement EMSs by 31 December 2005. Reference (a) was revoked by reference (b).

2. E.O. 13423. Reference (b). Establishes the EMS as the primary management approach for addressing environmental aspects, including energy and transportation aspects, and as the reporting mechanism for communicating progress on meeting performance goals.

3. E.O. 13514. Reference (c). Expands on Federal agency energy reduction and environmental performance requirements identified in reference (b). The primary goal of reference (c) is to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of GHG emissions a priority for Federal agencies. Reference (d) requires DOD to

develop and annually update a SSPP that lays out how targets and performance goals per reference (c) will be accomplished.

4. DOD Instruction 4715.17. Reference (d). Establishes DOD policy, assigns responsibilities, and prescribes procedures for conforming to requirements of reference (b).

#### 2104. TERMS AND DEFINITIONS

1. Aspect. A characteristic of a practice that can cause an impact to the environment or other resource. Each practice may have several aspects and each aspect may have several impacts. Standard Marine Corps aspects and relationships between practices and aspects are defined in the Marine Corps' prescribed risk software and are listed in Table 2-6.

2. Conformance. A facility is in conformance with established EMS criteria when it meets all applicable EMS requirements, has conducted an internal EMS audit, and self-declares conformance (see paragraph 2216). HQMC-sponsored external audits validate the self-declaration. Note that a facility may be considered to be in conformance with Marine Corps EMS criteria if it has one or more minor nonconformances, as long as it establishes and implements a Plan of Action and Milestones (POA&M) to correct each nonconformance.

3. Document. Information, stored on paper, electronic, or other media, that describes the organization, its goals or intent, or its procedures. Documents are subject to change over time. Examples of documents include the EMS Manual and procedures, the environmental policy statement, practice inventory and risk data, objectives and targets, installation plans (e.g., emergency response plans), the installation Environmental Compliance and Protection Standard Operating Procedure (ECPSOP), and regulatory permits.

4. EMS. A systematic approach for integrating environmental considerations and accountability into day-to-day decision-making and long-term planning processes across all missions, activities, and functions. The EMS institutionalizes processes for continual environmental improvement and reducing risks to mission through ongoing planning, review, and preventive or corrective action.

5. EMS-Appropriate Facility. Reference (d) defines an EMS-appropriate facility as a host command and its tenants within an installation fence line demarking contiguous property, as well as any satellite properties under direct control of the installation CG/CO. The appropriate facility may encompass multiple noncontiguous fence lines under direct control of the installation CG/CO or even the entire area of responsibility of the regional commander. An appropriate facility may also be defined as a major-mission tenant command when the command in question elects to define its component command EMS separate from the respective host activity EMS.

6. EMS Audit. A systematic and documented verification process that objectively obtains and evaluates evidence to determine whether an installation's EMS conforms to the USMC EMS conformance criteria and is effectively implemented.

7. EMS Reporting Module. A reporting program contained in the Web-based Compliance Assessment and Sustainment Software (WEBCASS) that allows the tracking of EMS element conformance or nonconformance (both major and minor), as well as recommendations for management practices to improve EMS element effectiveness.

8. E.O. A direct order signed by the President under his constitutional authority as Chief Executive, specifying responsibilities and actions required by Executive Branch agencies.

10. Impact. Any change to the environment, whether adverse or beneficial, resulting from the aspects. A list of standard Marine Corps impacts is maintained in the Marine Corps' prescribed risk software.

11. Major Nonconformance. A systemic weakness within the EMS that indicates the EMS is either failing or close to failure, or an issue that could lead to increased risk to mission. Major nonconformances may occur as a result of any of the following:

a. Failure to develop an Environmental Management Procedure (EMP) for one of the 17 EMS elements.

b. Failure to substantially implement a key procedure.

c. Failure to correct, or demonstrate steps to prevent the recurrence of previous nonconformances.

d. Multiple (systemic) minor nonconformances noted in one of the 17 EMS elements.

e. An issue that is not correctable in a timely manner (no greater than one year) at current funding and/or staffing levels.

12. Minor Nonconformance. An isolated EMS shortcoming that should not, by itself, cause the EMS to fail or cause an increase in risk to mission. Minor nonconformance may occur as a result of any of the following:

a. Failure to address some (but not all) requirements in an installation's procedures.

b. Failure to implement some parts of a procedure.

c. Inconsistent or inaccurate implementation of a procedure.

13. Objective. A statement that defines an end-state, supporting goals of the environmental policy statement. Objectives must be achievable and measurable, and should be quantifiable when practicable.

14. Practice. A unit process, operation, or product that supports the mission and has or can have aspects that can impact environmental resources. Standard practice types are listed in Table 2-6.

15. Practice Owner. The command, unit, or office responsible for day-to-day

implementation of a practice. Practice owners have the authority to accomplish or support their mission by implementing the practice and, thus, have the responsibility for procedures needed to keep it under control.

16. Record. Information, stored on paper, electronic, or other media, that states results achieved or provides evidence of activities performed. Records are not subject to change and, once created, cannot be modified. Examples of records include regulatory monitoring records, routine practice monitoring/inspection records, results of tracking objectives and targets, and results of past EMS and compliance audits.

17. Requirement. Legislation, regulation, or policy issued by any Executive, Federal, state, local, DOD, Department of Navy, or Marine Corps authority that addresses environmental considerations and requires action by Marine Corps personnel.

18. Risk to Mission. Potential or actual impacts on mission readiness resulting from the occurrence of aspects of practices operated aboard Marine Corps facilities. Mission impacts occur through four risk pathways: environmental impacts, adverse regulatory exposure, adverse public perception, or health and safety impacts. Risk ranking can be used to determine significant aspects of practices and prioritize resources.

19. Significant Aspect. An aspect determined by the installation to result or potentially result in at least one significant environmental impact.

20. Significant Impact. An impact determined by the installation to result or potentially result in a significant change to the environment.

21. Significant Practice. A practice determined by the installation to result or potentially result in a significant environmental impact due to its association with a significant aspect.

22. Standard Operating Procedure (SOP). A written procedure that instructs practice owners in the environmentally sound operation of practices. SOPs should be integrated into existing technical procedures or Manuals for operation of practices, when feasible, but may need to be distributed or posted in the work place as separate documents.

23. Sustainability. Defined in chapter 1 of this Manual.

24. Sustainable Practices. Section 2 of reference (b) directs Federal agencies to implement sustainable practices for:

- a. Improvement in energy efficiency and reduction in GHG emissions.
- b. Use of renewable energy.
- c. Reduction in water consumption.
- d. Sustainable acquisition.
- e. Reduction of the use and disposal of toxic and hazardous

chemicals and materials.

- f. Pollution and waste prevention/diversion and recycling programs.
- g. High performance and sustainable buildings.
- h. Vehicle fleet management.
- i. Electronics stewardship.

25. Target. A detailed performance requirement that sets a limit, usually a quantity and/or a time frame, for the achievement of objectives. An objective may have more than one target.

26. WEBCASS Software. A web application to document environmental compliance and EMS conformance deficiencies and manage corrective action plans.

CHAPTER 2

MARINE CORPS ENVIRONMENTAL MANAGEMENT SYSTEM

SECTION 2: MARINE CORPS POLICY

2200. ENVIRONMENTAL MANAGEMENT SYSTEM. This section provides general policy and criteria for conformance with the Marine Corps EMS as well as additional requirements and guidance relevant to EMS, and is organized according to the EMS framework of five components and 17 elements.

1. Scope of EMS at Active-Duty Installations. All active installations shall ensure that the EMS is installation-wide in scope and covers all installation commands and units, contractor-operated practices, and DOD tenant organizations. If any tenant or contractor does not wish to participate in the EMS, the installation must maintain documentation showing that the tenant or contractor was formally requested to participate in the EMS and has refused. Where appropriate, multiple installations may be included within the scope of a single appropriate installation's EMS (also see definition of "EMS-appropriate facility" under paragraph 2104); the requirements contained in paragraphs 2200 through 2217 will then apply to the multi-site EMS.

2. MARFORRES EMS. Headquarters, MARFORRES shall implement an organizational EMS that addresses all Marine Corps-owned and leased Reserve centers.

3. Tenant Marine Corps Commands. All tenant Marine Corps commands, both active and reserve, will participate in their host installation's EMS and will fully support their host installation in attaining and maintaining EMS conformance.

2201. ELEMENT 1: ENVIRONMENTAL POLICY

1. The U.S. Marine Corps environmental policy and directives are outlined in chapter 1 of this Manual. In keeping with this policy, each installation shall issue an environmental policy statement that:

- a. Is documented and signed by the installation CG/CO.
- b. Reflects the vision of the Marine Corps EMS to sustain and enhance mission readiness and access to training environments through effective and efficient environmental management.
- c. Commits to compliance with relevant environmental legislation, regulations, and policy; P2; conservation of natural and cultural resources; cleanup of contaminated sites; minimizing risks to mission; continual improvement in performance of the EMS. Note that Marine Corps installations in Japan are not required to commit to cleanup of contaminated sites, per Article IV of reference (f).
- d. Is communicated to installation personnel and made available to the public.

2. The environmental policy shall be implemented by the installation.
3. The environmental policy shall be reviewed at least annually and updated, as needed, to ensure that it remains appropriate to the installation's activities and mission.
4. CMC Environmental Statement. The CMC periodically publishes White Letters expressing his direction on environmental compliance matters. Each White Letter addressee should, if applicable, publish a policy for implementing each of these White Letters.

2202. ELEMENT 2: PRACTICES, ASPECTS, IMPACTS, AND RISK PRIORITIZATION

1. Practice Inventory. Each installation shall implement a documented procedure for inventorying practices, annually reviewing the practice inventory, and updating it as practices are altered, discontinued, or added. The practice inventory shall be installation-wide in scope to include contractor and tenant-operated practices.

a. Installations shall identify aspects associated with each practice on their inventory. Standard Marine Corps practice, aspect, and impact lists, along with standard practice-aspect associations, are maintained in the Marine Corps' prescribed risk software and are included in Table 2-6.

b. Installations shall identify key environmental resources and assess their vulnerability to the aspects of existing and planned practices. Key environmental resources include, but are not limited to, training lands, drinking water sources including groundwater and surface water bodies, indoor and outdoor air quality, Federally-recognized threatened and endangered species, wetlands and other sensitive ecosystems, and cultural and archaeological sites.

c. Installations shall identify GHG emissions as aspects of installation practices as required to meet Federal or state reporting requirements and reduction goals. Installations shall ensure that practices which significantly affect sustainable practice performance goals identified under references (b) and (c) are included in the practice inventory, as appropriate.

d. Installations shall identify their actual and potential environmental impacts. Installations will use WEBCASS to document and maintain their inventory of practices, aspects, and impacts and to assess significance.

2. Risk Prioritization. Prioritizing risk allows the Marine Corps to determine which aspects are significant based on whether they have or can have a significant impact on the environment.

a. Each installation shall implement a documented procedure to determine significant practices based on which practices have or could potentially have one or more significant aspects. Aspects are considered significant if they have one or more significant impacts. The procedure shall be repeatable and defensible and shall include a schedule for periodic review and update of the results.

b. Risk calculation. Risk shall be calculated at the aspect level, using Marine Corps-wide risk calculation standards implemented in the prescribed risk software. Risk is calculated as follows:

(1) Using WEBCASS, installations score risk for an aspect in four distinct categories: Environmental Risk, Regulatory Risk, Public Perception Risk, and Health and Safety Risk. Each category allows risk to be scored on a scale of 1 to 10 which takes into account any potential impacts identified. Weight for each risk category is assigned in the software.

(2) Table 2-1 lists aspect risk scoring criteria, Table 2-2 lists likelihood scoring criteria, and Table 2-3 lists mission impact scoring criteria used in WEBCASS.

(3) The aspect risk score (AR) reflects risk, likelihood, and mission significance. It is calculated by WEBCASS using the following formula:

$$AR = ((EW * E + RW * R + PW * P + HW * H) + HS) * L + M + I.$$

where

- (a) E = Environmental Risk Rank (1-10 with weight EW).
- (b) R = Regulatory Risk Rank (1-10 with weight RW).
- (c) P = Public Perception Risk Rank (1-10 with weight PW).
- (d) H = Health and Safety Risk Rank (1-10 with weight HW).
- (d) HS = Highest Score for any Risk Category (1-10).
- (e) L = Likelihood Factor (.5 to 2, based on 1-10 score).
- (f) M = Practice Mission Risk Ranking (1-10); and I = Adjustment Factor (0-5).

(4) The Adjustment Factor allows installations to use their professional judgment to adjust the score based on their installation's own circumstances as appropriate.

### 2203. ELEMENT 3: LEGAL AND OTHER ENVIRONMENTAL REQUIREMENTS

1. It is Marine Corps policy that all Marine Corps installations and activities comply with all applicable environmental requirements. Paragraph 1202 provides additional direction and policy guidance.

2. Each installation shall establish and implement documented procedures to identify Federal, state, local, DOD, DON, Marine Corps, and installation-level environmental requirements applicable to its practices and environmental programs. The legal and other requirements should be associated with the practices and aspects identified for the installation to establish relevance and facilitate the identification of appropriate controls for the practices.

3. Installations shall ensure that pertinent information regarding environmental requirements is available to appropriate personnel operating aboard the installation (e.g., environmental media managers and practice owners) in the form of policy, procedures, and checklists, as appropriate.

4. Installation CG/COs shall publish an ECPSOP document that includes all applicable organizational and environmental compliance policies and procedures and establishes environmental program roles and responsibilities. The ECPSOP should instruct program managers and practice owners on how to comply with applicable environmental requirements. ECPSOPs shall reference existing installation policies, procedures, and management plans rather than duplicate their content, as feasible. The ECPSOP shall be posted on the EM Portal (See also paragraph 2210).

a. Installation CG/COs are encouraged to publish a single ECPSOP versus multiple ECPSOPs. A single ECPSOP ensures continuity of effort and prevents conflicts in policies between various environmental media programs. It also facilitates communication with subordinate and Marine Corps command/unit and tenant COs by providing a single source for them to use. Installation, Fleet Marine Force (FMF), and major Marine Corps command/unit and tenant COs are encouraged to work together to publish a single ECPSOP.

b. Major FMF, detached, and separate commands will publish an ECPSOP if they are not co-signatories or otherwise subscribe to an installation ECPSOP (by directive, Intra(or Inter)-Service Support Agreements (ISSA), or Memorandum of Understanding (MOU)). The FMF, detached, and separate command ECPSOP will contain, at a minimum, policies on complying with reference (g) (normally limited to training-related activities), HM, HW, and emergency response plans.

c. ECPSOPs shall complement and reference, but not repeat, this Manual. ECPSOPs shall be reviewed annually and updated as necessary.

#### 5. Release of Information

a. The installation CG/CO or their designee has the authority to release installation-specific information to Federal agencies to the extent permitted by policy and the laws applicable to the release of agency records.

b. Reference (h) as amended or superseded, establishes Marine Corps policy for the release of information to the news media. The command Public Affairs Office coordinates the release of information to the news media.

c. Chapter 4 of this Manual discusses the release of ECE results.

d. Reference (i) requests that agency records be coordinated with the cognizant Freedom of Information Act (FOIA) office, public affairs office and counsel (if applicable) to ensure that these requests are handled in accordance with Federal law. A brief discussion of reference (i) is provided in chapter 4 of this Manual. Environmental laws and other environmental requirements (e.g., permits) may also mandate the release of information to governmental agencies and the public.

e. The general public can retrieve enforcement and compliance information about DOD facilities possessing environmental permits through regulatory agency websites such as the EPA's online Federal Facility Environmental Compliance Status Report. It is important that the information contained in EPA's database accurately reflects the Marine Corps' enforcement and compliance status. Therefore, COs must ensure this information is reviewed at least quarterly and work with EPA and state, local, and tribal governments to correct any inaccuracies. Installations shall monitor the EPA's Online Targeting Information System ([www.epa.gov/idea/otis/index.html](http://www.epa.gov/idea/otis/index.html)) and Enforcement and Compliance History Online ([www.epa.gov/echo](http://www.epa.gov/echo)) databases and tracking systems at least quarterly to ensure Marine Corps compliance data is current and accurate. Installations shall pay particular attention to the categorization of Significant Non-Compliance (SNC):

(1) Identify if the installation is listed as a "major" Federal facility.

(2) Verify installation address and permits associated with the installation.

(3) Verify all reported data associated with the permits.

(4) Report any errors and follow up with EPA data stewards until errors are resolved.

f. The SNC List can be accessed at <http://www.epa.gov/echo>. SNC guidance is also available at the Defense Environmental Network and Information Exchange (<https://www.denix.osd.mil/denix.html>). Additional DON Clean Water Act (CWA) SNC guidance, including SNC criteria and User's Guides to the EPA databases can be found at <https://www.denix.osd.mil/denix/DOD/Policy/component.html#navy-memos> (NOTAL).

6. Information Security. Federal, state, and local environmental regulators periodically inspect Marine Corps installations. During these inspections, Federal civilian employees and service members must ensure compliance with applicable orders governing the control and protection of classified and sensitive information. Before permitting environmental regulators with appropriate security clearances or access authorizations requested classified or sensitive information, the information holder shall ensure that each recipient understands and complies with the applicable security requirements governing the information requested.

a. Only personnel with appropriate security clearances or access authorizations will be permitted access to classified areas or information, and then only upon a determination by the cognizant Marine Corps official that a "need-to-know" exists to fulfill a legitimate regulatory purpose. In keeping with the need-to-know principle, such access shall be limited to information relevant to the purpose of the inspection.

b. Marine Corps installations handle a considerable amount of sensitive unclassified information controlled under Marine Corps security regulations, Federal export control regulations, and other government-wide requirements. While security clearances or access authorizations are not required for access to this information, a "need-to-know" determination still must be

made.

2204. ELEMENT 4: OBJECTIVES, TARGETS, AND ACTIONS TO IMPROVE PERFORMANCE

1. Objectives and Targets. Each installation shall establish, implement, and document environmental objectives and targets, and communicate them to installation employees at all appropriate levels and functions. Objectives and targets shall be established at the relevant functions and levels within the installation.

2. Installations shall ensure that objectives and targets:

a. Take into account risks to mission determined through the risk calculation procedure. Installations must take into account their significant aspects when establishing their objectives and targets; however, installations do not need to establish an objective and target for every significant aspect and practice.

b. Are consistent with and supportive of the installation's environmental policy, environmental requirements, and sustainability goals.

c. Take into account the views of any interested parties, either external or internal.

d. Are achievable within economic and technological restraints.

e. Are measurable.

f. Are reviewed and revised at least annually, according to a schedule established by the installation.

3. Actions to Improve Performance. Each installation shall identify, implement, and maintain plans for achieving its objectives and targets. Plans shall designate responsibilities and shall identify the timeframes for achieving each objective and target at relevant functions and levels of the installation. Actions, funding, and resource requirements should all be described within the objective and target POA&Ms.

4. Each installation shall implement identified actions within the installation CG/CO's responsibility and budget (behavioral and administrative actions) to achieve objectives and targets.

5. Installations shall program for and execute actions requiring external funding and/or expertise (i.e., projects (see paragraph 2205.2)).

2205. ELEMENT 5: ROLES, RESPONSIBILITIES, AND RESOURCES. This element is divided into two subcategories: Roles, Responsibilities, and Programs; and Funding and Manpower. This division allows for better discrimination of root causal factors. Compliance assessments will use the EMS elements as root causes for findings.

1. Roles, Responsibilities, and Programs. The Environmental Department at each installation shall take a lead role to ensure that the EMS is properly

implemented. Environmental programs, however, are not assigned exclusively within the Environmental Department, and other organizations (e.g., Facilities, Safety, and Medical), play key environmental management roles. Environmental program responsibilities are assigned in chapter 1 of this Manual, and programmatic roles will be delineated in the ECPSOP per Element 5.

2. EMS responsibilities are assigned in section 3 of this chapter.

a. Each installation shall document and communicate EMS roles, responsibilities, and authorities for:

- (1) The EMS Team.
- (2) Environmental program managers and staff.
- (3) Practice owners including tenants and on-site contractors.

b. EMS Team members shall be formally appointed by the installation CO (also see paragraph 2217.1). Per reference (d), the EMS Team should include personnel from environmental and other departments, including but not limited to: mission units, planning, procurement, contracts, logistics, legal, budget, facility, energy, and technical support functional areas and other functional areas as appropriate. Additionally, the command shall appoint an EMS manager who has a defined role, responsibility and appropriate level of authority for:

- (1) Ensuring that EMS is established, implemented and maintained in accordance with the MCO P5090.2A
- (2) Reporting to the Command on the performance of the EMS including recommendations for improvement.

c. Installations shall review and modify media programs to ensure that they support the environmental policy statement and contribute to achieving EMS objectives and targets.

d. Installations shall identify all contracts that can significantly affect the installation's significant aspects, and shall maintain an inventory of such contracts. Requirements shall be included in all appropriate contracts to ensure that contractor's responsibilities under the EMS are properly addressed, to include control of contractor-operated practices.

e. Officer of the Day/Command Duty Officer (OOD/CDO). The OOD/CDO is the installation CG/CO's representative during non-duty hours. The OOD/CDO's primary responsibility is to receive emergency calls during non-duty hours and inform the CG/CO and staff of significant incidents. Each OOD/CDO turnover folder shall contain an environmental staff recall roster and coordinating instructions for emergency reporting (e.g., hazardous substance (HS) spills). All installation and unit HS response plans and other contingency plans or procedures will require the OOD/CDO to be contacted immediately after contacting emergency response personnel.

f. GOCO Facilities. Marine Corps installations and commands sponsoring GOCO facilities shall ensure that GOCO facility use and management contracts require each contractor to participate in the Marine Corps ECE Program and the installation's EMS. Marine Corps installations and/or commands sponsoring GOCO facilities should also encourage GOCO facilities to incorporate the P2 EMH (see paragraph 1203) into project planning and design.

g. Desktop Procedures and Turnover Folders. Installation COs shall ensure desktop procedures and turnover folders are developed and maintained for environmental billets. See appendix D for desktop procedure guidance and turnover folder requirements.

h. Facility Land Use. When managing DOD real property on which private activities are permitted, licensed, or otherwise authorized or regulated, installations shall consider the environmental impacts of such activities in identifying significant aspects and establishing objectives and targets.

## 2. Funding and Manpower.

a. Each installation shall identify projects for external funding either as actions to achieve objectives and targets (see paragraph 2204.1) or as corrective/preventive measures identified through problem solving (see paragraph 2214).

b. The Marine Corps may partially fund regional and community pollution control and solid waste management solutions where there is sufficient benefit to the Marine Corps. All such funding requests shall be coordinated with CMC (LF) and CMC (CL) to ensure the availability and proper expenditure of appropriations.

c. Each installation shall track expenditures and execute funds through existing budget mechanisms in accordance with chapter 3 of this Manual.

d. Each installation shall periodically evaluate manpower dedicated to environmental management, and realign roles and responsibilities to support the installation's objectives and targets and planned EMS improvements.

### e. Environmental Engineering Management Officer

(1) Each large installation shall have an appropriately ranked Marine Officer MOS 8831, Environmental Engineering Management Officer billet assigned to its Table of Organization. Marine Corps Combat Development Command (MCCDC), MARFORRES, Marine Corps Logistics Command (MARCORLOGCOM), and each region (MCI East, MCI West, MCI Pac) should also consider MOS 8831 positions where appropriate. Smaller installations are encouraged to make use of MOS 8831s available at the larger installations and regions as required.

(2) An MOS 8831 officer is an active duty officer with fleet experience and is a graduate of the Special Education Program or Advanced Degree Program. An MOS 8831 possesses a master's degree in environmental engineering, management, or science or has otherwise met the requirements delineated in reference (h). MOS 8831s address multi-media environmental

compliance, management, and sustainability issues that involve Marine Corps units, both operationally and at the installations.

(3) CMC(LF) is the MOS sponsor for MOS 8831. All Navy Marine Corps (NAVMC) 11355 Table of Organization & Equipment (T/O & E) Change Requests and NAVMC 11345 Billet Education Evaluation Certificates with command endorsements must be submitted to MCCDC, Total Force Structure Division via CMC (LF).

f. HM/HW Officer/Marine. All units that handle HM should have Marines who are qualified under MOS 8056 (formerly MOS 9954). MOS 8056 was established as a secondary MOS to provide the Marine Corps with uniformed Marines trained to manage HM and HW, primarily at the unit level. See chapter 5 of this Manual for additional MOS 8056 requirements.

g. Unit Environmental Compliance Coordinators (ECCs or UECs). All units are required to appoint ECCs to help ensure that unit environmental requirements, to include training requirements, are sufficiently addressed. See chapter 5 of this Manual for additional requirements.

#### 2206. ELEMENT 6: COMPETENCE, TRAINING, AND AWARENESS

1. Each installation shall identify environmental training needs associated with its practices, aspects and impacts and the EMS.

2. Each installation shall identify, provide, and document training and instruction needed to:

a. Comply with applicable requirements.

b. Ensure practice owners understand procedures for controlling their practices and are competent to operate practices in a compliant and environmentally sound manner.

c. Ensure that all installation personnel are aware of the EMS and understand:

(1) The importance of conformity with the environmental policy and procedures and with the requirements of the EMS.

(2) The significant environmental impacts and related or potential impacts associated with their work and the environmental benefits of improved personal performance.

(3) Their roles, responsibilities and authorities in achieving conformity with the requirements of the EMS.

(4) The potential consequences of departure from specified operating procedures.

3. Installation environmental training requirements shall be executed through the Comprehensive Environmental Training and Education Program (CETEP)(see chapter 5 of this Manual).

4. Training Requirements for Marine Corps EMS Auditors

a. Persons responsible for conducting EMS audits must have successfully completed an EMS Lead Auditor Training course within the three years immediately preceding any EMS audit in which they will serve as an auditor. Allowable courses include HQMC-sponsored USMC EMS Lead Auditor Training, Navy EMS/Compliance Auditor Training with USMC supplement, or ISO 14001 Lead Auditor Training with USMC supplement.

b. Persons who have taken the EMS Lead Auditor Training previously and continue to serve in a billet with EMS responsibilities may satisfy this requirement by completing EMS Lead Auditor refresher training; such refresher training must have been completed within three years immediately preceding the EMS audit. Refresher training can be offered on-site, via webinar, or can be obtained by attending any CMC(LF) sponsored EMS/CETEP Conference.

c. A copy of each auditor's lead auditor training certificate (with refresher training date, if applicable) will become part of the audit records for each annual EMS conformance audit.

2207. ELEMENT 7: COMMUNICATION

1. Internal Communication. Each installation shall implement documented procedures for internal communication among the installation CG/CO, the EMS Team, the Environmental Office, other program managers (such as Facilities, Safety, Medical, etc.), all units and offices which own practices, and others within the Marine Corps interested in the installation's environmental affairs. Internal communications procedures will include the communication vehicles for installation personnel to be kept apprised of the EMS and EMS-related information including the system's status and changes. Communications procedures shall also include methods available to all installation personnel and contractors to communicate with EMS staff on EMS-related issues.

2. External Communication. Each installation shall implement documented procedures for receiving, recording, and responding to communications from regulatory agencies, the public, and others outside the Marine Corps who are interested in the installation's environmental affairs. These documented procedures shall include the procedures for communicating externally with the public, including how the installation will provide the Environmental Policy to the public.

3. Reporting Enforcement Actions. Immediately after receiving an enforcement action or other notice of noncompliance from a regulatory authority regarding a failure or potential failure to comply with an environmental requirement, the cognizant installation shall:

a. Report it via the chain of command to the Environmental Compliance Officer, CMC (LF), by submitting a Report of Notice of Violation (NOV)/Notice of Noncompliance Report per the procedures in appendix C. Report Control Symbol, MC-5090-01, is assigned to this reporting requirement.

b. Coordinate with the responsible unit to correct the alleged violation or, after consulting with counsel, prepare a plan to achieve and maintain compliance. The responsible unit and/or cognizant installation should also consult with counsel to determine whether an administrative and/or criminal investigation or a litigation report is appropriate.

4. Coordination between Environmental Managers and Marine Corps Commands/Units and Tenants. To promote Marine Corps environmental compliance and a greater understanding of host-tenant EMS responsibilities, Marine Corps installations and DOD tenant commands should develop ISSAs or similar instruments which define inter-organizational environmental management, compliance, and protection responsibilities. Each Marine Corps installation shall audit DOD tenant organization environmental compliance activities on the installation. DOD tenant organizations shall participate in the Marine Corps ECE Program and in the Marine Corps EMS.

5. Coordination between Environmental Managers and Counsel. Environmental program managers and staff must work closely with their legal counsel. Many environmental compliance issues could directly and indirectly impact the legal rights and responsibilities of both the Marine Corps and individuals working aboard the installation. Accordingly, environmental program managers and staff must consider legal matters when considering the practical and policy consequences of their actions. Legal counsel is uniquely qualified to advise environmental program managers and staff in this regard. Providing counsel with timely information and following their advice can avoid or mitigate the impact of potentially serious legal matters.

6. Regulatory Inspections. Upon the presentation of proper credentials, authorized EPA, state, or local regulators or representatives must be allowed to enter a Marine Corps installation at reasonable times to examine or copy records, inspect monitoring equipment, or sample any effluents or emissions that the officials have the authority to regulate. Such inspections, however, are subject to the information and installation security requirements set forth in paragraphs 2203.5 and 2203.6.

7. Regional and Community Programs. Marine Corps representatives should participate in regional or community planning programs that involve installation interests. This participation is generally limited to an advisory (i.e., non-voting) role in matters of Marine Corps interest. Local outreach programs such as Earth Day and other community outreach activities which appropriately demonstrate Marine Corps environmental stewardship are highly encouraged.

2208. ELEMENT 8: EMS DOCUMENTATION

1. Each installation shall maintain EMS documents, approved by the installation CG/CO that describe:

a. EMS elements including the procedures to implement them, as described below.

b. How elements relate to each other.

- c. Reference to other documents and records relevant to the EMS and where they are maintained.
2. Installations are encouraged to integrate their EMS documents with their ECPSOP, in order to consolidate environmental manuals in a single location.
  3. EMS documents should include:
    - a. The environmental policy,
    - b. Objectives and targets,
    - c. Description of the scope of the EMS,
    - d. Roles, responsibilities and authorities to facilitate effective environmental management,
    - e. Significant environmental aspects,
    - f. Information to monitor performance including progress towards meeting the objectives and targets,
    - g. Applicable operational controls;
    - h. Any other documents determined by the Installation to be necessary to ensure the effective planning, operation and control of processes that relate to significant environmental aspects.

2209. ELEMENT 9: CONTROL OF DOCUMENTS

1. Each installation shall inventory all documents appropriate to its environmental programs and practices and identify other documents essential to the efficient operation of its EMS.
2. Each installation shall implement a system to maintain documents so that they:
  - a. Can be located.
  - b. Are reviewed and updated as necessary.
  - c. Are available when and where needed in their current versions, and older versions are removed from circulation and destroyed or archived as appropriate.
3. Installations may use the electronic document library function of the Environmental Management (EM) Portal to meet document retention and control requirements of paragraph 2209.2. Use of EM Portal is encouraged for managing installation EMS documents, but is required for certain higher headquarters information reviews (e.g., PAI, Environmental Management Review, Annual EMS Conformance Report, EMS LAT certificates). A list of items required to be posted to the EM Portal is included at appendix E. The installation EMS sites on EM Portal are structured by the 17 EMS elements, and allow installations to create links to policy, procedures, and other

programmatic data to ensure that EMS requirements are satisfied and that the documents are managed, current, and available to all who need them. EM Portal provides guidance for use of the site.

2210. ELEMENT 10: OPERATIONAL CONTROL OF PRACTICES

1. Each installation shall ensure that each significant practice on the installation is controlled to sufficiently minimize risk to mission and impacts to the environment and to comply with all applicable regulations and policy.
2. Each installation shall ensure the owners and operators of all significant practices have procedures for the proper control of their practices which reduce environmental risks. These procedures may be included in higher-tier orders (e.g., Marine Corps Orders (MCOs), OPNAVINST, DOD Instruction (DODI)), the installation ECPSOP or other base order, an environmental media management plan (e.g., Integrated Contingency Plan (ICP), Spill Prevention Control and Countermeasures (SPCC) Plan, Integrated Natural Resources Management Plan (INRMP)), or in a practice-specific manual, SOP, or environmental standard operating procedure (ESOP).
3. Installations shall ensure that appropriate installation orders are reviewed for the potential to cause significant environmental impact, and environmental control requirements are incorporated or referenced as needed.
4. Installations shall ensure that practice owners and operators maintain current practice control procedures in the workplace and that these procedures are addressed in employee training when appropriate.
5. Practice control procedures shall include instructions for operational control, internal communication, emergency preparedness and response, inspection and corrective action, and training and awareness applicable to the practice.
6. Practice control procedures shall identify who is responsible for implementing each action and how often it is to be carried out.
7. Where the control of a significant practice is not addressed in sufficient detail through higher-tier order, the base ECPSOP or other base order, a signed base plan, or existing practice-specific operating manuals or SOPs, the installation shall update these procedures, plans, or orders as appropriate to include procedures for practice control. If such updates are determined not to be practical or possible, the installation shall prepare a practice-specific ESOP that meets the requirements of paragraphs 2210.5 and 2210.6.
  - a. Installations are encouraged to use the Practice Control Planning Matrix format provided in Table 2-4 to identify existing practice control procedures (and the need to develop ESOPs) for each significant practice operated aboard the installation.
  - b. ESOPs should be included as appendices to the installation's ECPSOP to facilitate easy updates by environmental program managers, and to provide an easy reference for all environmental requirements and procedures

applicable to the installation.

2211. ELEMENT 11: EMERGENCY PREPAREDNESS AND RESPONSE

1. Each installation shall document their procedures for identifying and responding to accidents and emergencies and for avoiding where possible and if not, mitigating the resulting environmental impacts. Installations should not write separate emergency preparedness and response procedures for addressing environmental issues, but should rather ensure that the installation's current procedures address environmental aspects of preparedness and response.

2. Each installation shall review and revise their emergency preparedness and response procedures when new practices are initiated, after the occurrence of accidents or emergencies, or as required by regulation or policy.

3. Procedures to be followed in the event of an accident or emergency shall be communicated to building managers and practice owners in scope and detail appropriate to their responsibilities.

4. Installations shall test emergency preparedness and response procedures periodically as practicable.

2212. ELEMENT 12: MONITORING AND MEASUREMENT

1. Each installation shall track progress toward meeting EMS objectives and targets through the use of installation POA&Ms.

2. Each installation shall monitor practices, including those operated by contractors, that may have a significant impact on the environment and, where appropriate, the resources that may be impacted and the control of those practices.

3. Installations shall calibrate or verify applicable monitoring and measuring equipment as appropriate and shall maintain the associated records.

4. Each installation shall monitor the conformance of their EMS and the status of their compliance with regulatory and other requirements through self-audits (2216) and the Marine Corps ECE Program (2213).

2213. ELEMENT 13: EVALUATION OF COMPLIANCE

1. Evaluation of compliance is accomplished through the Marine Corps ECE Program, discussed in chapter 4 of this Manual.

2. Installations shall evaluate all commands, units, and tenants for compliance with applicable laws, regulations, and directives at least annually, and shall ensure that all other installation activities (such as contractor and outlease activities) comply with the same.

3. Each installation shall prepare and implement a compliance self-audit plan that describes its compliance self-audit program required under

paragraph 4202 of this Manual.

4. EMS conformance problems will be identified during the evaluation of compliance and corrective and preventive actions identified and tracked as described in 2214.

2214. ELEMENT 14: PROBLEM SOLVING

1. Each installation shall follow a structured problem solving or corrective and preventive action process that identifies and defines problems or potential problems with compliance or EMS conformance, analyzes root causes and alternative solutions, selects and implements actions, and follows up to ensure problems and potential problems are solved and actions are taken to mitigate any environmental impacts and avoid any recurrence. Problems are typically identified through compliance audits, monitoring of EMS objectives and targets, and inspection of practices (see paragraphs 2213.1, 2212.2, and 2216).

2. Installations shall document their corrective and preventive action procedure, progress towards implementing each corrective and preventive action, and the results and effectiveness of corrective and preventive actions taken.

3. Corrective and preventive actions shall be appropriate to the magnitude of the problems and the potential or actual environmental impacts.

2215. ELEMENT 15: CONTROL OF RECORDS

1. Each installation shall inventory all records appropriate to its EMS, including records relating to training (2204), the monitoring of practices and tracking of objectives and targets (see paragraph 2212), compliance evaluations (see paragraph 2213), EMS audits (see paragraph 2216), training, and management reviews (see paragraph 2217).

2. Each installation shall implement a system to maintain records so that they:

- a. Can be located.
- b. Are protected from alterations or damage.
- c. Are available when and where needed.
- d. Are removed from circulation when obsolete, and destroyed or archived as appropriate.

3. Installations may use the electronic document library function of the prescribed risk software to meet records retention and control requirements of paragraph 2215.2. A list of items required to be posted via the risk software is included at appendix E.

4. Retention and Disposition of Records

a. Installations and units must retain their agency records related to environmental compliance and management per reference (k), Standard Subject Identification Code (SSIC) 5090.4 unless noted below.

b. Installations and units shall retain agency records relating to HS releases per references (k), SSIC 5090.3; (l); (m), and (n). This requirement generally applies to the ER program records consisting of the ER administrative record for the installation. Other agency records related to the ER program shall, pending promulgation of EPA regulations for their disposition, be retained in accordance with the most stringent requirements of reference (k) and DON ER program policy.

2216. ELEMENT 16: EMS AUDIT

1. Each installation and HQ MARFORRES shall evaluate its EMS through an EMS self-audit.

2. The EMS self-audit shall be conducted at least annually, per reference (d). Installations are not required to conduct EMS self-audits in years in which an external EMS audit has occurred or is scheduled to occur as part of a Benchmark ECE, though they are required to implement any corrective action required. EMS audits are conducted as part of the ECE program.

3. Installations shall document the results of each EMS self-audit, as well as any corrective actions resulting from the audit (see 2214), in the WEBCASS auditing software. EMS conformance audits shall be performed after the annual compliance self-audits in order to make use of the root cause associations with the EMS elements.

4. The results from annual EMS self-audits shall be reported to HQMC no later than 30 September of each year, via .pdf upload to the EM Portal's document library and HQMC email notification. Those reports will be made under appropriate cover signed by the active installation CG/CO or Commander, MARFORRES. Reports will include:

a. Enclosure 1: A summary of the installation's EMS conformance by element. In years in which a Benchmark ECE takes place, the installation should prepare the conformance summary based on the results of the Benchmark EMS audit. A standard conformance report format is included in WEBCASS.

b. Enclosure 2: A copy of the meeting minutes from the installation's most recent annual Management Review attended or reviewed by the installation CG/CO. See paragraph 2217.3 for management review documentation requirements.

c. Enclosure 3: A copy of each EMS auditor's EMS Lead Auditor Training certificate with refresher training dates annotated, as applicable.

5. The subject line of the submittal cover letter shall read, "USMC ANNUAL EMS CONFORMANCE SUMMARY" and shall state whether the installation IS or IS NOT in conformance with Marine Corps standards.

6. Per reference (d), installations shall self-declare EMS conformance at

least every three years; annual conformance reports and external EMS audits every three years as part of the HQMC ECE validation meet this requirement.

2217. ELEMENT 17: MANAGEMENT REVIEW

1. The CG/CO of each installation shall designate and authorize an EMS Team to analyze EMS implementation efforts and the results of EMS reviews (also see paragraph 2205.1(b)) and brief installation leadership, at least annually.

2. Each Management Review should include, at a minimum, the following information:

a. A review of significant environmental practices at the installation, highlighting those with the highest associated risks.

b. Results of the annual EMS self-audit and conformance status, or results of the external EMS audit (to include compliance and conformance results), if conducted that year. Progress in executing POA&Ms to correct identified nonconformance. Highlight any compliance deficiencies over one-year old or which need the CG/CO's attention to resolve.

c. A review of objectives and targets and status in meeting them.

d. Results of regulatory inspections received during the year.

e. Any other pertinent indicators of environmental performance to include program trends and root causal factors for compliance deficiencies.

f. Requests for senior management support to promote continued performance improvement, as required.

3. Management reviews shall be documented and posted to the EM Portal. Documentation must be signed by the installation CO/CG and should include, at a minimum, an attendee list, agenda, a summary of discussions, and action items with dates.

4. Installation leaders shall provide guidance and direction to the EMS Team for implementing EMS improvements, along with manpower and other resources as needed.

5. The EMS Team shall take actions that ensure the EMS is suitable to the current mission and is effective in achieving the installation's policy, objectives, and targets. The EMS Team shall implement improvements to the EMS including but not limited to revising the installation's EMS policy; changing procedures, projects or actions to ensure current objectives and targets are met; establishing new objectives and/or targets, or clarifying/assigning roles and responsibilities, as appropriate.

CHAPTER 2

MARINE CORPS ENVIRONMENTAL MANAGEMENT SYSTEM

SECTION 3: RESPONSIBILITIES

2300. CMC (LF)/COMMANDER MCICOM

1. Develop and manage the Marine Corps EMS framework, policy, and requirements.
2. Support Marine Corps installations and units in applying the EMS policies within this Manual, and provide leadership commitment.
3. Plan and implement an HQMC-level organizational EMS to facilitate and coordinate consistent EMS implementation across the regions and installations.
4. Promote cross-functional integration at HQMC, Region, and installation-levels to support EMS and sustainability goals.
5. Conduct HQMC-sponsored EMS and ECE audits and ensure that installations conduct self-audits at least annually except in years in which a Benchmark ECE takes place.
6. Use EMS as the framework for defining and tracking sustainability goals.
7. Coordinate environmental compliance and protection issues with DOD environmental Executive Agents, DOD RECs, Component RECs, Marine Corps installations and units, and counsel.

2301. CG OF MCI EAST, WEST, AND PACIFIC

1. Facilitate efficient and consistent EMS implementation with Marine Corps installations and units in their respective region, in support of the goals of this Manual.
2. Coordinate environmental compliance and protection issues with Marine Corps installations and units, Marine Corps RECs, and counsel in their respective region.
3. Plan and implement a regional-level EMS that provides adequate oversight of compliance, NEPA actions, funding, training, and other environmental priorities (e.g., encroachment, information technology, range management) within the respective region.

2302. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMANDER MARINE CORPS FORCES RESERVE (COMMARFORRES)

1. Implement an EMS that conforms to Marine Corps EMS requirements, and for COMMARFORRES, provides a programmatic, organizational EMS that covers all Marine Corps Reserve Centers. Installations are not immediately required to modify their EMS to the 17-element model, though they should do so no later

than December 2013. Table 2-5 lists the previous USMC EMS elements and their current equivalents.

2. Report NOV's or similar assertions of noncompliance to higher headquarters and respond to them appropriately.

3. Coordinate EMS and environmental compliance and protection issues with DOD Environmental Executive Agents, DOD Regional Environmental Counsels (RECs), Component RECs, Marine Corps installations and units, and counsel.

4. Promote cross-functional integration across Environmental and other departments to support EMS and sustainability goals as appropriate, including but not limited to: mission units, procurement, contracts, logistics, legal, budget, facility, energy, and technical support functional areas and other functional areas.

5. Use EMS as the preferred management tool for ensuring that environmental components of sustainability performance objectives and targets are effectively established and met.

6. At least annually, review EMS performance, including the status of EMS objectives and targets, to ensure that the installation's EMS continues to support continual environmental improvement. Provide guidance and direction for EMS improvements, along with manpower and other resources as needed.

7. Ensure environmental staff is given the opportunity during the review cycle to recommend additions to any installation orders with significant environmental impact.

2303. MARINE CORPS TENANT COMMANDERS. Ensure all tenant Marine Corps commands, both active and reserve, participate in their host installation's EMS or implement a separate EMS that meets Marine Corps EMS requirements, as appropriate.

2304. CMC (CL). With regional and installation counsel, advise Marine Corps clients, including CMC (LF), Marine Corps RECs, and Marine Corps installations and units regarding environmental compliance and protection issues.

2305. ALL MARINE CORPS PERSONNEL. Perform job responsibilities in an environmentally compliant and responsible manner per SOPs and in a manner supportive of EMS goals, objectives, and targets.

REFERENCES

- (a) Executive Order 13148, "Greening the Government Through Leadership in Environmental Management," April 21, 2000 (revoked)
- (b) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (c) Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," October 5, 2009
- (d) DOD Instruction 4715.17, "Environmental Management Systems," April 15, 2009
- (e) JP 4-0, Doctrine for Logistic Support of Joint Operations, 6 April 2000
- (f) Status of US Armed Forces in Japan Agreement (SOFA), 196
- (g) 42 U.S.C 4321-4347
- (h) SECNAV Instruction 5720.44B, "Public Affairs Policy & Regulations," November 1, 2005
- (i) 5 U.S.C 552
- (j) MCBUL 1200.17
- (k) SECNAV M-5210.1
- (l) 42 U.S.C 9601-9675
- (m) 40 CFR 300
- (n) DON Environmental Restoration Program (DERP) Manual, Chapter 14

Table 2-1.--Aspect Risk Scoring Criteria

Environmental, regulatory, public perception, and health and safety risks must be identified for each aspect by selecting the phrase from the appropriate column that best answers the following question:

If this aspect were to occur, what is the degree of (environmental/regulatory/public perception/health and safety) risk that it would pose?

Score	Degree of Risk by Category			
	Environmental	Regulatory	Public Perception	Health & Safety
10	Ecological disaster, no recovery likely, extensive loss of wildlife and habitats	Utter negligence, shut-down operation	Permanent damage to organizational reputation, political intervention required	Potential mass casualty, Low probability survival
9				
8				
7				
6				
5	Moderate impact to ecology, wildlife threatened	Likely NOV, significant program shortfalls	Serious community concern, Public demonstration, sense of unfairness	Moderate injury (temporary), sickness, lost work days
4				
3				
2				
1	Earth friendly, no impact	No applicable regulation or order	No negative public effect, business as normal	No health threat, Effect easily mitigated

Table 2-2.--Aspect Likelihood Scoring Criteria

Likelihood of occurrence must be identified for each aspect by selecting the word from the "Likelihood" column that best answers the following question:

How likely is it that this aspect will occur, given existing engineering controls, training, SOPs, and other precautions used with the associated practice?

Score	Likelihood
10	Inevitable
9	
8	
7	Likely
6	
5	
4	Unlikely
3	
2	
1	
0	Negligible

Table 2-3.--Mission Impact Scoring Criteria

The degree of mission impact must be identified for each practice, by selecting the word from the "Mission Impact" column that best completes the following statement:

If this practice were to be interrupted, it would have an impact on installation operations and mission.

Score	Mission Impact
10	Catastrophic
9	
8	
7	Major
6	
5	
4	Minor
3	
2	
1	Negligible

Table 2-4.--Practice Control Planning Matrix

Objective: To ensure that all significant environmental practices have published procedures that will mitigate environmental risk for practice owners. Installations should update existing SOPs to address control of practices with significant environmental risk.

Environmental SOPs should serve as reference documents for practice owners, and should be referenced in appropriate base orders as required.

The following matrix is an example.

Significant Practices	Is control of significant practice addressed in sufficient detail in one or more of the following?				Need for ESOP	
	Higher Order	ECPSOP	Other Base Order	Signed Base Plan	Does a separate ESOP need to be developed? (Y/N)	Comments
	Specify (e.g. DODI, OPNAVINST, MCO)	Specify section.	Specify Order and Section.	Specify (e.g., SPCC, ICP, INRMP, FRP)		
<i>Example Practice Type 1</i>	<i>MCO P5090.2A</i>	<i>No</i>	<i>No</i>	<i>SPCC</i>	<i>No</i>	
<i>Example Practice Type 2</i>	<i>No</i>	<i>2.A</i>	<i>BO 5090.XX</i>	<i>No</i>	<i>No</i>	
<i>Example Practice Type 3</i>	<i>DODI 4715.XX</i>	<i>No</i>	<i>No</i>	<i>ICP</i>	<i>No</i>	
<i>Example Practice Type 4</i>	<i>No</i>	<i>5.X (not enough detail)</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>Updates to ECPSOP planned FY11.</i>
<i>Example Practice Type 5</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>ICP to be updated FY10 to address.</i>
<i>Example Practice Type 6</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	

SPCC = Spill Prevention Control and Countermeasures      INRMP = Integrated Natural Resource Management Plan

ICP = Integrated Contingency Plan

FRP = Facility Response Plan

ECPSOP = Environmental Compliance and Protection Standard Operating Procedure

Table 2-5.-- Revised (17-element) vs. Old (18-element)  
USMC EMS Structure

Revised 17-element Structure		Old 18-element Structure	
#	Element Name	#	Element Name
1	Environmental Policy	1	Environmental Policy Statement
2	Practices, Aspects, Impacts, and Risk Prioritization	3	Practices, Aspects, Impacts
		4	Risk Prioritization
3	Legal and Other Environmental Requirements	2	Requirements
4	Objectives, Targets, and Actions to Improve Performance	5	Environmental Objectives and Targets
		6	Actions to Improve Performance
5	Roles, Responsibilities, and Resources	7	Structure, Responsibilities, and Programs
		8	Funding and Manpower
6	Competence, Training, and Awareness	9	Training
7	Communication	10	Communication
8	EMS Documentation	14	EMS Document
9	Control of Documents	12	Document and Record Control
10	Operational Control of Practices	13	Environmental SOPs
11	Emergency Preparedness and Response	11	Emergency Preparedness and Response
12	Monitoring and Measurement	15	Monitoring and Measurement
13	Evaluation of Compliance	15	Monitoring and Measurement
14	Problem Solving	16	Problem Solving
15	Control of Records	12	Document and Record Control
16	EMS Review	17	EMS Review
17	Management Review	18	Management Review

Table 2-6.--Standard Practice Types, Aspects and Impacts

The Marine Corps' standard practice types, aspects, and impacts are listed below. Marine Corps installations shall use these lists in developing their practice inventory and prioritizing risks to mission.

Note: These lists are subject to change; installations may request additions or modifications to these lists by contacting CMC (LF). The lists below are provided for reference only, and are current as of March 2011. Installations shall refer to the prescribed risk software for the current versions of these lists.

**Practice Types:**

Acid cleaning	Medical/dental operations
Aircraft combat training	Metal working
Aircraft deicing	Nondestructive inspection
Aircraft GSE operation and maintenance	ODS/Halon Management
Aircraft maintenance	Open burning/open detonation
Amphibious training	Packaging/unpackaging
Battery management	Paint booth
Boat operation/maintenance	Paint gun cleaning
Boat, ramp, dock cleaning	Paint removal
Boiler operation	Painting
Building operation/maintenance/repair	Painting preparation
Burnout oven operation	Parts replacement
Channel dredging	Patch Testing
Chemical treatment	PCB Management
Chlorination	Pesticide/herbicide management and application
Combat construction training	Photographic developing
Commuting	Polishing
Composting	Pumping station/force main
Construction/renovation/demolition	Radioactive material storage
Cooling tower operation and maintenance	Range residue clearance
Degreasing	Recreational facilities operations

Table 2-6.--Standard Practice Types, Aspects and Impacts Continued	
Practice Types:	
Drinking water management	Road construction and maintenance
Dry cleaning	Rock crushing operations
Encampment	Roofing kettle
Engine operation and maintenance	Row crop agriculture
EOD training	Sewers
Equipment operation/maintenance/disposal	Sidewalk and road deicing
Erosion/runoff control	Silver recovery unit operation
Field mess	Soil excavation/grading
Fire department training	Solid waste collection/transportation
Fish stocking	Solid waste disposal offsite transport
Flare and smoke usage	Solid waste landfill
Forest fire management	Solid waste recycling facility
Fueling and fuel management/storage	Storage tank management
Grease traps	Stormwater collection/conveyance system
Habitat management	Surface washing
HCP operation	Swimming pool operation and maintenance
HM storage	Timber management
HM transportation	Turbine generation
HW disposal offsite transport	Universal Waste Storage/Collection
HW recycling	Urban wildlife management
HW satellite accumulation area	UXO/EOD operations
HW storage (< 90 day site)	Vehicle maintenance
HW transportation	Vehicle parking
Infantry training	Vehicle smog inspection
Laboratory	Wash rack
Landfill gas energy recovery system	Wastewater flare operations
Landscaping	Wastewater treatment
Laundry	Water heater operation and maintenance
Live fire range operations	Weapons cleaning
Livestock operations	Woodworking

Table 2-6.--Standard Practice Types, Aspects and Impacts Continued	
<b>Aspects:</b>	
Air Emissions	Nuisance odor
Asbestos presence	Physical presence
Electricity use	Potable water backflow or cross-connection
Fire/explosion	Radon presence
Fuel use	Soil disturbance
GHG Emissions	Solid waste generation
Hazardous material use	Spill
Hazardous waste generation	Stormwater discharge
Lead-based paint presence	Vegetative disturbance
Material (non-hazardous) use	Wastewater discharge
Noise	Water use
<b>Impacts:</b>	
Air quality degradation	Potable water quality degradation
Community relations/public perception impact	Real property/private property damage
Depletion of landfill space	Reduced visibility
Depletion of resources	Soil compaction
Electricity consumption	Soil erosion
Flooding	Soil quality degradation
Fuel consumption	Surface water quality degradation
Groundwater quality degradation	Water consumption
Historic/cultural resource disturbance	Wetlands disturbance
Other natural resource disturbance	Wildlife species/habitat disturbance
Personnel exposure	

CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

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CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

SECTION 1: INTRODUCTION

3100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for funding environmental compliance and protection.

3101. APPLICABILITY. See paragraph 1101.

3102. BACKGROUND. This chapter describes funding sources and mechanisms for planning, programming, budgeting, and executing environmental requirements. It also outlines the means for securing the funds needed to manage an effective environmental program. Funding of Marine Corps environmental requirements is provided primarily from the Operation and Maintenance, Marine Corps (O&M,MC) account for active duty installations and from the Operation and Maintenance, Marine Corps Reserves (O&M,MCR) account for Reserve Centers. Other environmental funding may be provided from the Naval Working Capital Fund (NWCFF); Military Construction (MILCON); reimbursable Agricultural Outlease, Forestry, and Fish and Wildlife Access Fees; Qualified Recycling Program (QRP) revenues; and the Defense Logistics Agency (DLA) Energy funds (see paragraph 3105). For information on funding the ER program, see chapter 10 of this Manual.

3103. FEDERAL STATUTES. Congressional waivers from Federal sovereign immunity in most environmental laws require Federal agencies to pay reasonable service charges to reimburse states for their environmental regulatory oversight. Reasonable service charges related to state implementation of the CWA, the Clean Air Act (CAA), and the Resource Conservation and Recovery Act (RCRA) requirements are among the types of fees that may be billed to an installation.

3104. REQUIREMENTS

1. E.O. 13423, (Reference (a)). This reference requires Federal agencies to comply with applicable Federal, state, local, and host nation environmental laws and regulations. Accordingly, reference (a) requires the head of each Executive Agency to ensure that:

a. "Sufficient funds for compliance with applicable pollution control standards are requested in the agency budget."

b. "Funds appropriated and apportioned for the prevention, control, and abatement of environmental pollution are not used for any other purpose unless permitted by law and specifically approved by the Office of Management and Budget."

2. DOD Policy. The Office of the Secretary of Defense (OSD) has established environmental funding policies. These policies require that all requirements in Class 0, I, and II be funded consistent with timely execution to meet future deadlines. The definitions for these classes can be found in the Environmental Conservation, P2, and Environmental Compliance DOD Instructions

(references (b), (c), (d) and (e), respectively).

3105. TERMS AND DEFINITIONS

1. Authority to Advertise. Authority given to an installation to advertise a project. This is the formal commitment of funds by CMC (LF).
2. Budget Review (BR). The annual BR is the procedure each installation follows to budget and request Operating Budget (OPBUD) and CMEP O&M, MC funding from the Commandant of the Marine Corps, Facilities and Services Division (CMC (LF)). It replaces LFF POM and Operational Plan Submission (OPS) data calls, resulting in one annual data update, review and validation process. The installation BR submission is made via the environmental program database tool and includes the installation's plan for executing O&M,MC funds.
3. Centrally-Managed Environmental Program (CMEP). The CMEP is the CMC (LF), O&M,MC program for resourcing Marine Corps-wide environmental initiatives and non-recurring and emergent installation environmental requirements for active duty only, to include both Environmental Management and Environmental Projects Programs.
4. Contract Advertisement Forecasts (CAF). A forecast of when environmentally-driven FSRM projects will be ready for contract advertisement and award. The CAF shall be provided by each activity semi-annually by 15 February and 15 June of each year. The 15 February submission will be used by HQMC to plan the straddle program and the 15 June submission will be used to develop the next fiscal year program.
5. Headquarters Authority for Environmentally-Driven Facilities Sustainment, Repair, and Modernization (FSRM). The HQMC Environmental Projects Program is that part of the CMEP for developing, prioritizing and funding environmentally-driven FSRM for active duty only (formerly: Maintenance of Real Property) projects at Marine Corps installations. This program is for those environmental FSRM projects that exceed an installation's local funding authority as identified in Table 3-1. More information can also be found in reference (f).
6. Local Authority for FSRM (Locally Managed Funds for Environmental Minor Repair and Construction (M1/M2)). Any FSRM project that is within an installation's local funding authority as identified in Table 3-1.
7. Marine Corps Environmental Program Database Tool. The environmental program database tool is a web-enabled application for tracking Marine Corps environmental compliance status, requirements, and associated costs.
8. MILCON. A single undertaking with a funding cost in excess of \$750,000 that includes all construction necessary to produce a complete and usable facility, or a complete and usable improvement to an existing facility. MILCON projects must receive Congressional approval in both authorization and appropriations laws before construction can begin.

9. NWCF. The NWCF is a revolving account which does not expire. If these funds are not used during the fiscal year, they revert back to the central NWCF account at the end of the fiscal year and are charged back in the rates to their customers.
10. O&M,MC Funds. The O&M,MC account is the Marine Corps operation and maintenance appropriation. This appropriation provides the primary source of environmental project funding for active-duty installations and units. (See paragraphs 3201.3b and 3201.3c for further details.)
11. O&M,MCR Funds. O&M,MCR is the Marine Corps operation and maintenance appropriation for Reserve installations and activities.
12. Planning, Programming, Budgeting, and Execution (PPBE) System. The PPBE System is the process through which all Marine Corps resource requirements, including the environmental program, are identified, justified, planned, programmed, budgeted, and funded.
13. POM. The DOD POM data collection biennially identifies United States Marine Corps total program requirements for six years beyond the next fiscal year. Each installation and unit's biennial POM proposal, in part, identifies future environmental program objectives. The Marine Corps environmental POM is submitted and validated via the environmental program database. Data is updated and validated annually via the BR process.
14. POM Preparation Instruction (PPI). The PPI is the guidance HQMC provides installations and units to prepare their biennial POM submissions.

CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

SECTION 2: MARINE CORPS POLICY

3200. FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION. Reference (a) requires that the Marine Corps adequately plan, program, and budget compliance with applicable pollution control standards. Once funds are appropriated and apportioned for the prevention, control, and abatement of environmental pollution, they may not be used for any other purpose unless permitted by law or specifically approved by the Office of Management and Budget.

3201. ENVIRONMENTAL FUNDS

1. NWCF. The NWCF is a revolving account that does not expire. If funds are not used during the fiscal year, they revert back to the central NWCF account at the end of the fiscal year and are charged back in the rates to their customers. Marine Corps Logistic Bases (MCLBs) are encouraged to charge their NWCF tenant commands for MCLB services that ensure their compliance with environmental requirements. MCLBs must track these costs and report them to CMC (LF) for subsequent reporting to the DON Secretariat, DOD, and Congress.

2. MILCON. Each Marine Corps installation forwards its requests for MILCON projects requiring Congressional approval to CMC (LF). Installations must include MILCON projects required for environmental compliance within these requests. CMC (LF) validates all MILCON projects requiring Congressional approval. CMC (LF) tracks and reports the costs of Congressionally authorized MILCON projects required for environmental compliance.

3. O&M,MC

a. CMC (LF) primarily distributes O&M,MC funds via base operating support funds and CMEP. To obtain base operating support and CMEP funds, installations identify funding requirements through the PPBE System via the environmental program database tool. CMC (LF) tracks and reports these requirements to the DON Secretariat, DOD, and Congress. Both base operating support and CMEP funds are apportioned from the O&M,MC appropriation and must be obligated within the fiscal year in which they are available. These statements apply to active duty only.

b. Base Operating Support Funds. Funding requirements that are foreseeable, routine, recurring, and can be reasonably estimated and are properly budgeted within each installation's base operating support account. Installations must include these requirements in their OPBUD and document them in the environmental program database tool. These requirements include, but are not limited to, salaries, permits, fees, HW disposal, sampling, monitoring, analyses, training, travel, maintenance, supplies, and materials. Costs for operating QRP shall be budgeted as Real Property Services vice environmental costs. Installations must obligate base operating support funds using the Standard Accounting, Budgeting and Reporting System (SABRS)

environmental accounting codes.

c. CMC (LF) CMEP. The CMEP funds installation-level environmental management and environmentally-driven FSRM projects. CMEP applies to active duty only. CMEP is also used to support Marine Corps-wide environmental initiatives such as the ECE Program (see chapter 4 of this Manual). Installations must obligate CMEP funds using the appropriate SABRS environmental accounting codes.

(1) The Environmental Management Program. This program provides supplemental funding of non-recurring requirements or recurring requirements that develop or emerge too late to be considered in a PPBE System cycle. Installations must use the environmental program tool during the annual budget review to request these funds.

(2) The Environmental Projects Program. This program provides funding for environmentally-driven, Headquarters authority FSRM projects. These FSRM funds are separate from the facilities FSRM account. Each installation shall provide a CAF semi-annually. The 15 February submission will be used by HQMC to plan funding for the straddle program and the 15 June submission will be used to develop the funding plan for the next fiscal year. The CAF submission will be via the CAF module of the Facilities Integration (FI) website at <https://www.hqmc-facilities.org>. In submitting the forecast, installations shall provide the current working estimate (CWE), when the project is available for advertisement, the relative priority of each project, and any associated unfunded costs (refer to reference (f) for more information on unfunded costs). Each program (M2, R2, and individual special programs) shall be prioritized and listed separately. If the project's CWE is greater than 20 percent of the approved CWE in the FI website, a new DD Form 1391 will be required before the project can be listed on the CAF. CMC (GF) will use the CAF submission to determine which projects will receive authority to advertise and will commit funds in the amount of the government estimate. The committed amount may not exceed 20 percent of the original government estimate without additional approval from CMC (GF). Requests for approval of increased amounts will be submitted via the Project Update Module of the FI website and include a revised DD Form 1391 detailing the new government estimate and addressing any change in scope. Additionally, a justification for the cost increase and a detailed cost estimate or an economic analysis may be required on a project-by-project basis. A formal net present value life-cycle economic analysis is required for:

(a) All repair projects with an estimated cost which is greater than \$750,000 and more than 50 percent of the facility's plant replacement value.

(b) All repair projects with an estimated per facility cost greater than \$2 million.

(c) Guidelines and formats for preparing economic analyses are contained in reference (g). Discount factors are updated annually and published in reference (h). Results of analysis are to be submitted with other required documentation.

4. O&M,MCR. MARFORRES identifies and manages environmental O&M,MCR funds through the PPBE System via the environmental program database tool. MARFORRES must track these costs and report them to CMC (LF) in the environmental program database tool for subsequent reporting to the DON Secretariat, DOD, and Congress.

5. Reimbursable Accounts. CMC (LF) manages several reimbursable accounts. These accounts include:

a. Lease Proceeds. Leasing Marine Corps land for agriculture or other purposes generates rental proceeds. The NAVFAC field activity servicing the lease agreement must deposit these proceeds into a special account. For general lease proceeds, CMC (LF) makes portions of the proceeds available to installations where the proceeds were derived to cover expenses associated with maintaining the leases (e.g., personnel costs for managing real estate or for natural resources monitoring actions) and for other purposes authorized by law. Portions of these proceeds are also available for other installations' maintenance and protection of property or facilities and for other purposes authorized per reference (i). Agricultural or grazing lease proceeds are managed apart from general lease proceeds, and CMC (LF) may make them available to installations to cover the administrative expenses of agricultural or grazing leasing, and cover the financing of land management programs. Agricultural or grazing lease proceeds, which expire at the end of the fiscal year, are non-appropriated, reimbursable funds. Requests for lease proceeds must be submitted through the environmental program database tool (see paragraph 3202).

b. Forestry. The sale of forest products (e.g., timber) from Marine Corps-owned or -leased land generates forestry proceeds. Installation or the NAVFAC field activity personnel servicing timber sales contracts must deposit these proceeds into the Marine Corps forestry account (part of a DOD-administered reserve account established in the Department of the Treasury). CMC (LF) makes these proceeds available to installations with forestry programs to fund direct expenses associated with forest management (i.e., forestry personnel salaries, forestry equipment, reforestation, timber management, fire and forest pest control, and forest access road maintenance). Per references (j) and (k), the state in which an installation is located from which forest products are sold is entitled to 40 percent of the net revenue of forest product sales at the end of each fiscal year. Sixty percent of the net revenue from installation forest product sales shall be deposited in the DOD Forestry Reserve Account. Net revenue is the total revenue collected from sale of forest products less reimbursed expenses associate with forest management. DOD Forestry Reserve Account funds may be available to improve forest lands, pay for unanticipated contingencies in the administration of forest lands, and natural resources management that implements approved plans and agreements. Installation requests for these funds to support direct forestry expenses and for DOD Forestry Reserve Account funds must be submitted via the environmental program database tool with subsequent requests forwarded to CMC (LF) via email each quarter. Direct Forestry and DOD Forest Reserve Account funds, which expire at the end of the fiscal year, are non-appropriated, reimbursable funds.

c. Hunting, Fishing, and Trapping Access Fees. Installations shall

establish fees for issuing hunting, fishing, and trapping licenses. Each installation must deposit license proceeds into an installation Hunting, Fishing, and Trapping Access Fee account (see chapter 11 of this Manual). CMC (LF) authorizes obligations from installation Hunting, Fishing, and Trapping Access Fee accounts, and funds within these accounts shall only be obligated for the protection, conservation, and management of installation hunting, fishing, and trapping programs. Installation requests for obligation approval are submitted to CMC (LF) via the environmental program database tool. License proceeds within Hunting, Fishing, and Trapping Access Fee accounts are non-appropriated, reimbursable funds that do not expire but must be reauthorized each fiscal year by CMC (GF).

d. Qualified Recycling Program Revenues. The distribution of installation QRP proceeds shall comply with the requirements of references (l) and (m). These requirements mandate that proceeds from the sale of recyclable materials be credited to funds available for operations and maintenance at the installation and be used to cover the installation's costs of operations, maintenance, and overhead for processing recyclable materials at the installation. After reimbursement of these costs, installations may use up to 50 percent of the remaining proceeds on projects for environmental compliance, energy conservation, and occupational safety and health activities with first consideration given to projects included in the installation's P2 plan. However, no project shall cost more than 50 percent of the amount established by law for a minor construction project. Any remaining proceeds may be transferred to the non-appropriated morale and welfare account of the installation to be used for any installation morale or welfare activities.

#### 6. DLA Energy Funds

a. DOD bulk petroleum management policy authorizes the DLA Energy to fund certain recurring environmental compliance costs involving DLA Energy-owned product. Reference (n) broadens this policy to fund non-recurring environmental compliance projects, including maintenance and repair and minor construction for facilities storing DLA Energy-owned product.

b. Environmental Compliance. The cognizant installation commander is ultimately responsible for compliant DLA Energy-owned product storage on the installation. DLA Energy, however, shall fund the following recurring environmental compliance costs:

(1) Environmental Compliance Document Revisions. DLA Energy will fund the cost of legally-required revisions of environmental compliance documents (Spill Prevention, Control, and Countermeasures Plans) that are directly related to the storage of DLA Energy-owned product.

(2) Sampling and Testing. DLA Energy will fund sampling and testing of emissions and discharges if the cost of both sampling and testing involves DLA Energy-owned product.

(3) Waste Removal and Disposal. DLA Energy will fund removal and disposal of HW as an environmental compliance cost if the cost is directly linked to facilities containing Defense Energy Support Center-owned product. However, DLA Energy will not fund disposal costs for absorbent pads,

contaminated rags, and other consumable items commonly used for small spill cleanups.

(4) The Design and Construction of Environmental Compliance Projects. DLA Energy will fund projects that upgrade petroleum, oil, and lubricant (POL) facilities in order to control emissions and discharges, enabling installations to meet environmental regulatory standards. Also funded are projects needed for POL facilities to achieve regulatory compliance in order to continue operations.

(5) Operational Permit Fees. Accepted annual recurring costs for permits are those involving DLA Energy-owned product that may affect the environmental quality of air and/or water. Examples include permits for the following: fill stands, fuel storage tanks, oil-water separators, pipelines, and hydrant systems.

(6) Fines and Penalties. DLA Energy will review fines and penalties incurred on a case-by-case basis for reimbursement. DLA Energy will not reimburse fines and penalties incurred due to the negligence of the operating activity.

c. Installations with eligible requirements are encouraged to submit their funding requests to DLA Energy by completing applicable DESC forms and worksheets. Installations shall give CMC (LF) a copy of all documents submitted to DLA Energy.

d. Installations may submit requests for reimbursement for DLA Energy-owned product spills. For more information, contact CMC (LF) or DLA Energy at: (703) 767-8318/8309 or DSN 427-8318/8309.

### 3202. MARINE CORPS ENVIRONMENTAL PROGRAM DATABASE TOOL

1. Background. Reporting to Congress through the Office of the Secretary of the Navy and OSD requires that all environmental compliance requirements and costs be tracked. The Marine Corps uses the environmental program database tool to meet this requirement. All Marine Corps environmental requirements must be entered into the environmental program database tool as those requirements are identified, and must be maintained with the most current information available to assist CMC (LF) validation of the requirements in the POM and annual BR submittals and appropriate CMEP funding prioritization. CMEP applies to active duty only. As previously identified through the processes described in paragraphs 3201.1 through 3201.6, this information tracking requirement includes all environmental fund sources and appropriations.

2. Identifying Requirements for Environmentally-driven FSRM Projects through the environmental program database tool. As soon as an environmentally-driven FSRM project requirement is identified, a project shall be entered into the environmental program database tool. Ensure that the same project number and title is used in all related documents and databases. Place the same project number on DD Form 1391 using the naming procedure for the Environmental Maintenance and Repair Program, which is the two letter installation prefix identifier (e.g., CP or PE), the last two digits of the

fiscal year (FY) in which funds are required (e.g., 08 for FY 2008), up to five alphanumeric characters (e.g., E8331), and the repair or construction designator (e.g., M or R). For example, a FY 2007 major repair project at Marine Corps Air Station Cherry Point would be numbered "CP0748190M." All environmentally-driven FSRM M2/R2 projects must be entered into the environmental program database tool with a completed DD Form 1391 attached before they will be reviewed by CMC (GF).

3. Requesting Funds for Environmental FSRM Projects (M2/R2). Requests for the funding of environmental FSRM projects previously identified through the process in paragraph 3202.2 are to be submitted to CMC (LF) per reference (e), as amended or superseded. The CAF, will be used to plan the straddle program and develop the next fiscal year program. Projects must be listed on the CAF as well as in the environmental program database tool for funding consideration. Once a confirmed low bid has been determined, an installation may request funds for contract award using the Request for Funds Module of the FI Website at <https://www.hqmc-facilities.org>.

3203. BUDGET, EXECUTION, AND SABRS ACCOUNTING CODES. Marine Corps environmental funding generates a high level of interest within the Marine Corps, as well as with the Comptroller of the Navy, OSD, and Congress. Due to unique fund flow structures at each installation and unit, environmental funds provided as part of each installation or unit's base operating support funds risk losing their identity once released from HQMC. This risk requires each installation or unit executing environmental funds to use SABRS environmental accounting codes to accurately track these funds in the environmental program database tool and SABRS. These accounting codes are available in the environmental program database tool and must be used to support POM proposals and requests for CMEP funding for emergent requirements.

3204. REPORTING REQUIREMENTS. Installations and units must comply with the following reporting requirements using the environmental program database tool:

1. POM and Annual BR. Using the environmental program database tool every year, and via their chain of command, each installation, unit, and MARFORRES shall submit to CMC (LF) their budget requests showing their environmental compliance and protection program requirements for the current year, the next fiscal year and six years beyond the next fiscal year. To facilitate this process, CMC (LF) environmental program sponsors will distribute a BR guidance to installation and unit environmental managers and comptrollers. CMC (LF) environmental program sponsors will use the environmental program database tool to validate installation and unit proposals. The validated proposals may be included in each Marine Corps POM submittal submitted every two years as directed by Regional Commanders and COMMARFORRES.

2. OPS and the Annual BR Submission. The OPS has been incorporated into the annual BR. Every fiscal year, each installation and unit shall submit to CMC (LF), via the environmental program database tool, their current year CMEP emergent requirements for CMC (LF) review and validation along with all OPBUD requirements. Each installation and unit BR will include the environmental compliance and protection requirements the installation or unit plans on

funding that fiscal year, the next fiscal year and for six years beyond the next fiscal year. The BR is also a mechanism for installations to request CMEP funds for environmental management and environmental projects. CMEP applies to active duty only. To facilitate this process, CMC (LF) environmental program sponsors will distribute BR preparation guidance to installation and unit environmental managers and comptrollers. CMC (LF) environmental program sponsors will use the environmental program database tool to validate installation and unit BR submittals and make funding decisions for CMEP requirements.

3. Environmental Liabilities. DOD is required to report environmental liabilities in annual financial statements under Note 14, Environmental Liabilities and Disposal Liabilities. Several laws require that financial statements are complete, accurate, and auditable, including references (o), (p), (q), and (r). As part of this requirement, Marine Corps installations must accurately identify, estimate, and report all environmental liabilities, ensuring that all cost estimates are auditable. Reference (s) defines an environmental liability as "a probable and measurable future outflow or expenditure of resources that exist as of the financial reporting date for environmental cleanup costs resulting from past transactions or events." Environmental cleanup includes activities related to ER of environmental sites, corrective actions, future disposal of facilities, equipment, munitions, or closure of facilities. Cleanup costs may include, but are not limited to, decontamination, decommissioning, site restoration, site monitoring, closure, as well as post closure costs related to DOD operations that result in the generation of HW. Additionally, cleanup costs must be tied to an environmental or legal requirement. Developing complete, accurate, and auditable estimates for environmental liabilities requires the participation of the environmental, financial, and audit communities. The environmental community assigns responsibility and authority for developing, viewing, and changing estimates and retains all supporting documentation. The financial community identifies the need for an environmental liability estimate and the factors that may affect the estimate. The financial community also determines whether the estimate is prepared and presented in accordance with applicable accounting principles and sufficient disclosure is provided. Finally, the audit community reviews the life-cycle of the processes and procedures used by the environmental and financial communities to identify, capture, track, classify, estimate, and report environmental liabilities on financial statements. The audit community also ensures that the proper recognition, measurement, presentation, and disclosure of a liability are performed.

3205. FUNDING NEPA AND E.O. 12114 REQUIREMENTS. Estimated costs associated with compliance documents as per reference (t) must be identified early in planning the proposed action. The proposed action sponsor is responsible for the budgeting and funding requirements of NEPA compliance. Preparing a NEPA or E.O. 12114 decision document is not considered an environmental compliance requirement; therefore, the costs of NEPA decision document preparation, to include all supporting studies, must be borne by the proposed action sponsor. For example, installations or units with training operations triggering decision document preparation pay the costs of preparing the documents. However, environmental compliance funds may fund NEPA or E.O. 12114 decision document preparation when the proposed action triggering environmental

analysis is an environmental compliance project. Similarly, costs associated with required environmental compliance permits and selected action environmental impacts mitigation may be considered environmental compliance costs.

3206. FEES AND TAXES

1. The Constitution generally prohibits the states from directly taxing agencies of the Federal Government. Marine Corps installations and units, therefore, are not authorized, absent specific Congressional authority, to pay direct taxes to state or local agencies. Marine Corps installations and units do pay reasonable permit fees and other reasonable service charges to the extent permitted by law. Before an unprecedented fee payment is made, it is necessary to evaluate, in part, whether the fee is a reasonable service charge or a non-payable tax. All installation and unit environmental compliance fee-tax questions shall be referred to CMC (CL) or its area or installation offices for analysis and the REC for inter-service coordination. The disposition of an unprecedented fee payment shall also be made in coordination with CMC (LF).

2. One Federal law (reference (u)), permits states to directly tax Federal installations and units. It empowers states to tax Federal agency low-level radioactive waste disposal, in the same manner and to the same extent, as any low-level radioactive waste not generated by the Federal Government.

3207. ECONOMIC ANALYSES. Installations and units shall conduct economic alternatives analyses before making final decisions on environmental compliance project alternatives. Each environmental compliance project funding request shall certify that an economic analysis of environmental compliance alternatives was conducted and include the economic analysis results. When assessing economic alternatives to environmental compliance requirements, installations and units shall consider the EMH, discussed in chapter 2 of this Manual.

3208. ENFORCEMENT ACTIONS AND FINES. Immediately report to the CMC (LF) any enforcement action by a regulatory agency for an alleged violation of any substantive or administrative requirement or of any attempt to levy a fine against a Marine Corps facility. Process the citation according to the processing procedures in appendix C. Marine Corps units shall pay all environmental fines issued by a regulatory agency.

3209. THE COSTS OF HAZARDOUS MATERIAL AND HAZARDOUS WASTE. The costs associated with the management of HM and HW will be paid in accordance with the following:

1. Installation Commanders. Installation commanders must pay the disposal costs of installation-generated HMs and HWs. Containers, labels, personal protective equipment (PPE), spill contingency supplies, etc., are routine operating expenses that should be borne by the original generator.

2. Marine Corps and Non-Marine Corps Units and Commands in Garrison. Marine Corps and non-Marine Corps units and commands in garrison must pay the costs associated with the generation (drums, labels, protective equipment for

personnel, etc.), containment (absorbent materials, overpack drums, etc.), preparation for transportation, and transportation of tenant-generated HMs and HWs associated with garrison-related, day-to-day activities and training not incident to exercises with specific funding responsibilities identified in an Inter-Service Support Agreement or other appropriate agreement with the host installation. The host installation will pay the disposal costs associated with installation organizations. Non-USMC Tenant activities will abide by their current inter and intra service/agency support agreements. If an agreement is not currently in place, then one shall be developed stating that each non-USMC Tenant is responsible for reimbursing the host Marine Corps installation for any cost associated with HW disposal.

3. Exercises with Unique Funding/Budgeting. Units and commands must fund the costs associated with the containment, preparation for transportation, transportation, and disposal of HWs that are generated coincident to an exercise that has unique funding. The cost of HW disposal should be managed the same as the cost for disposal of solid wastes, portable toilets, fuels, food, and other consumable supplies resulting from an exercise. The host installation commander must not add any overhead or handling costs.

4. Disposal of HMs as HWs. Over one-third of the HW disposal costs for the Marine Corps come from the disposal of HMs with an expired shelf life or from HMs contaminated by poor supply- and maintenance-handling procedures. The commander causing the disposal of HMs as HWs must bear the costs of containment, preparation for transportation, transportation, and disposal of the HWs. The host installation commander must not add any overhead or handling costs to these costs. Such costs might be avoided by the unit if they contact DLA Energy to request extension of the expiration dates.

5. HM and HW Spills. The command or unit responsible for the spill must pay the costs associated with the cleanup of spills and disposal of spill debris.

6. Procurement of Recycled HMs. At times, the cost of recycling HMs is less than the procurement cost of new material through local purchase or the national stock/supply system. When viable and cost-effective recycled HMs are available, installation commanders must give priority to procurement of these less expensive recycled HMs over the procurement of new materials.

7. DLA Energy Oil Spill Cost Reimbursement. Installations may submit oil spill remediation costs of spills from DLA Energy-owned fuel stocks to DLA Energy for reimbursement. Contact DLA Energy-WE at (703) 767-8312 or DSN 427-8312.

CHAPTER 3

FUNDING ENVIRONMENTAL COMPLIANCE AND PROTECTION

SECTION 3: RESPONSIBILITIES

3300. CMC (LF)/MCICOM

1. Advise the CMC (P&R) in preparing environmental compliance and protection program goals and associated funding requirements.
2. Advise OSD (I&E) in preparing environmental funding policy.
3. Serve as the environmental management program sponsor. Oversee Marine Corps environmental compliance and protection program requirements within the PPBE System to include reviewing and validating Marine Corps environmental compliance deficiencies.
4. Coordinate, consolidate, and, via HQMC Programs and Resources, Fiscal Division, submit Marine Corps environmental compliance and protection financial metrics to the DON Secretariat, DOD, and Congress.
5. Using information from the environmental program database tool, review installation and unit environmental compliance funding requests and distribute O&M,MC funds.
6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3301. COMMARFORRES

1. Coordinate and validate Marine Forces Reserve installation and activity environmental compliance requirements.
2. As applicable, ensure that adequate funding is planned, programmed, budgeted, and executed to meet force, installation, and unit environmental compliance requirements.
3. Ensure that force, installation, and unit environmental compliance requirements are entered into the environmental program database tool and kept current.
4. Coordinate POM proposals through CMC (LF).
5. Ensure that force, installation and units use SABRS environmental accounting codes.
6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those

responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3302. CG OF MCI EAST, WEST, AND PACIFIC

1. As applicable, create and submit funding requests for regional requirements that address the needs of several installations.
2. As applicable, review and validate environmental compliance requirements within installation and unit POM proposals and OPS submittals.
3. As applicable, ensure that adequate funding is planned, programmed, budgeted, and when available, executed to meet installation and unit environmental compliance requirements.
4. Ensure that all installation and unit environmental compliance requirements are entered into the environmental program database tool and kept current.
5. Coordinate POM proposals through CMC (LF).
6. Ensure that installation and unit use SABRS environmental accounting codes.
7. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3303. CG/CO OF MARINE CORPS INSTALLATIONS

1. Provide CMC (LF) installation POM proposals and OPS submittals via chain of command.
2. Ensure that adequate funding is planned, programmed, budgeted, and when available, executed to meet installation environmental compliance requirements.
3. Ensure that all installation environmental compliance requirements and funding data are entered into the environmental program database tool and are kept current.
4. Ensure proper use of SABRS environmental accounting codes.
5. Request permission from the CMC (LF) to reprogram CMEP, noting that reprogramming of CMEP is only from one environmental requirement to another environmental requirement. Requests for realignment of CMEP must contain the following for each project involved in the requested reprogramming: project title, the environmental program database tool project number, facilities project number (for FSRM only), dollar amount, and the EPA class. The request also must contain a brief justification/impact statement that necessitates this action. CMEP applies to active duty only.

6. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

3304. UNIT COMMANDERS

1. Ensure that adequate funding is planned, programmed, budgeted, and when available, executed to meet unit environmental compliance requirements.

2. As applicable, enter or forward unit environmental compliance requirements to COMMARFORLANT, COMMARFORPAC, or COMMARFORRES for entry into the environmental program database tool.

3. Ensure proper use of SABRS environmental accounting codes.

4. Ensure that officials with responsibility for environmental compliance and protection are adequately trained in the execution of those responsibilities, and that they possess adequate authority and resources to ensure that their recommendations concerning compliance are followed.

5. Shall direct units to pay all environmental fines.

REFERENCES

- (a) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (b) DOD Instruction 4715.3, "Environmental Conservation Program," May 3, 1996
- (c) DOD Instruction 4715.4 Ch. 1, "Pollution Prevention," July 6, 1998
- (d) DOD Instruction 4715.5, "Management of Environmental Compliance at Overseas Installations," April 22, 1996
- (e) DOD 4715.5-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (f) MCO P11000.5G Ch. 1, "Real Property Facilities Manual, Volume IV, Facilities Projects Manual," September 30, 2004
- (g) NAVFAC P-422, "Economic Analysis Handbook," June 1997
- (h) OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, Appendix C," December 12, 2008
- (i) 10 U.S.C 2667
- (j) 10 U.S.C. 2665
- (k) DOD Financial Management Regulation, Volume 11A, "Reimbursable Operations, Policy and Procedures, Chapter 16 - Accounting for Production and Sale of Forest Products," August 2002
- (l) 10 U.S.C. 2577
- (m) 32 CFR 172
- (n) DOD 4140.25-M, "DOD Management of Bulk Petroleum Products, Natural Gas, and Coal," Volumes I-III, dates vary
- (o) Section 101-307 of Public Law 101-576, "Chief Financial Officers Act of 1990," November 15, 1990
- (p) Section 1-11 of Public Law 103-62, "Government Performance and Results Act of 1993," August 3, 1993
- (q) Section 403-405 of Public Law 103-356, "Government Management Reform Act of 1994," October 13, 1994
- (r) Section 801-808 of Public Law 104-208, "Federal Financial Management Improvement Act of 1996," September 30, 1996
- (s) DOD 7000.14-R, "Department of Defense Financial Management Regulations (FMRS)," Volumes 1-15, dates vary

(t) 42 U.S.C. 4321-4347

(u) 42 U.S.C. 2021b-2021j

Table 3-1.--FSRM Funding Thresholds

Category of Work	Cost Limits	Approval Request To	Approval Authority
Repair (M1/M2)			
	\$0 - \$300,000 (M1)	None	CO
	\$300,001 - \$5M (M2)	CMC (LF)	CMC (LF)
	Over \$5 Million	CMC (LF)	ASN (EI&E)
	Over \$7.5 Million	CMC (LF)	Congress
Construction (R1/R2/MILCON)			
(a) General	\$0 - \$100K (R1)	None	CO
	\$100,001 - \$750,000 (R2)	CMC (LF)	CMC (LF)
	Over \$750,000 (MILCON)	CMC (LF)	Congress
(b) Solely to correct a life, health, or safety threatening deficiency	\$750K to \$1.5M	CMC (LF)	Congress

M1/M2 = Locally Managed Funds for Environmental Minor Repair and Construction

R1/R2 = Locally Managed Funds for Minor Construction

CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATION PROGRAM

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CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATION PROGRAM

SECTION 1: INTRODUCTION

4100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for ECE Program implementation. The ECE program satisfies the checking and preventive or corrective action component of the Marine Corps EMS.

4101. APPLICABILITY. See paragraph 1101.

4102. BACKGROUND

1. Federal regulations, E.O.s, and the EPA's Federal facility compliance policy encourage environmental "auditing" (i.e., self-evaluations) to ensure environmental compliance.
2. The Marine Corps ECE Program evaluates Marine Corps installation and unit environmental compliance. The ECE Program assesses each command's compliance risk level, identifies actions necessary to correct compliance deficiencies, monitors corrective measures, and facilitates continual improvement of environmental compliance and risk mitigation.
3. Per reference (a), the EPA encourages Federal facilities to adopt sound environmental management practices, particularly environmental auditing, "a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements," to help achieve and maintain environmental compliance. Environmental auditing includes a variety of compliance assessment techniques and may be used to verify environmental compliance, evaluate EMS effectiveness, or assess risks from materials and practices, both regulated and unregulated.
4. The DOJ and the EPA have emphasized the importance of environmental auditing per references (b) and (c). The EPA clarified its environmental auditing policy in 2000 as per reference (d).

4103. FEDERAL STATUTES. No Federal statutes are specifically discussed in this chapter. Reference (e) requires "Federal agencies to conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner." Reference (13514f) expands on Federal agency energy reduction and environmental performance requirements identified in reference (e). The primary goal of reference (f) is to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of GHG emissions a priority for Federal agencies.

4104. REQUIREMENTS

1. All Marine Corps installations shall participate in the ECE Program.

Evaluations conducted under the ECE evaluate compliance with all environmental program requirements and will include all operations and activities within the installation boundary. Evaluations will include tenant activities, out grants, leases, and other activities under the purview of the United States Marine Corps. This program includes self-evaluations of installation programs with environmental requirements, evaluations of installation commands and tenants, and an HQMC oversight Benchmark ECE program.

2. Installations are required to implement an annual Self-Audit Program that inspects every permitted site and source, every process which generates a waste or may be considered a potential source, and every command/unit and tenant. Installations shall also perform an annual EMS evaluation per chapter 2 of this Manual.

3. HQMC will conduct "Benchmark ECEs" every three years to periodically assess installation environmental compliance and EMS Conformance. Each installation shall prepare and make available for CMC (LF) review, within 60 days after the ECE out-brief, a POA&M to correct all identified findings. Each installation shall update the POA&M at least annually, and notify CMC (LF) no later than 365 days (1 year) after the most recent Benchmark ECE that the POA&M is ready for annual review.

4. The USMC WEBCASS is the only software authorized to track Marine Corps environmental compliance. All Marine Corps installations will use WEBCASS software and (TEAM) Guide checklists to track both HQMC-sponsored ECEs and the installation's Self-Audit Program. Trend data on environmental compliance and programs is available through the WEBCASS software.

#### 4105. TERMS AND DEFINITIONS

1. Compliance. Meeting the minimum required standards in law, statute, or policy.

2. ECE Program. The ECE Program provides the commander an assessment of the command's environmental compliance, associated risk, and, as needed, mandatory or recommended corrective compliance actions. It provides the Commandant with a broad view of Marine Corps environmental compliance trends. The ECE Program consists of triennial Benchmark ECEs and a continuous installation Self-Audit Program.

a. Benchmark ECE. A triennial, systematic, documented, and objective CMC (LF) ECE of an installation.

b. Annual Validation of the Benchmark POA&M. Installations are required to provide an annual validation of the POA&M of the most recent Benchmark ECE. This validation provides a formal follow-up to previously identified findings and is not to be confused with the Self-Audit Program.

c. Self-Audit Program. An installation's annual, systematic, documented, and objective environmental compliance audit. Each installation and unit shall implement, or be included within, a Self-Audit Program. The Self-Audit Program will use the WEBCASS software as a tool to track

compliance.

3. Environmental Compliance Inspection. A critical evaluation apart from the ECE Program of an installation or unit's environmental compliance. An environmental compliance inspection may include a regulatory agency inspection, an Inspector General inspection, or non-DOD technical assistance site visit.

4. Finding. Identified deficiency that is not in compliance with an environmental requirement. Findings are identified as Class I, II, III, and Issues:

a. Class I. A violation of applicable Federal, state, and local requirements that could result in a NOV, a fine, or other civil or criminal enforcement action. Findings are caused by noncompliance with applicable Federal, state, and local requirements. Class I findings are also caused by actions or situations that, while unregulated, may present an imminent and substantial danger to the public health or welfare, prejudice good order and discipline in the armed services, or bring discredit upon the armed services. For overseas installations, a Class I finding is defined as a violation of the requirements of reference (g) or country-specific FGS, or status of forces agreements (SOFA). Class I findings were formerly known as "Findings."

b. Class II. Not in compliance with future Federal, state, or local requirements that could result in a NOV, a fine, or other civil or criminal enforcement action after the date the requirement is enacted.

c. Class III. A finding that would not result in an NOV, a fine, or other civil or criminal enforcement action. Class III findings may be caused by poor management practices and/or failure to follow non-punitive provisions of applicable SOPs, MCO, and DON and DOD directives. Class III findings were formerly known as "Discrepancies."

d. Issues. A finding beyond the capability of the installation or unit to correct on its own that requires higher HQ coordination or intervention to resolve. Issues may include a finding common to several installations or units that requires a higher HQ policy change, inter-service coordination requirements, or findings requiring action on the part of other agencies external to the Marine Corps.

e. Repeat findings. Repeat findings are specific findings that were previously identified and addressed/closed, but are subsequently re-identified as a finding. The intent of the "repeat" is to highlight problems that have been identified in the past, but which have not received adequate corrective action. Repeats may be identified from benchmark ECEs or other internal/external audits. WEBCASS allows auditors to identify and track repeat findings; these findings are considered a higher compliance risk.

5. Management Practices. Management Practices are general recommendations that promote more effective, efficient, and safe ways to maintain environmental compliance. These may reference practices and procedures identified at other Marine Corps or Federal installations.

6. Positive Finding. An installation practice that is clearly proactive, exceeds normal standards, and is an exemplary way of addressing environmental requirements. HQMC may use positive findings to communicate BMPs to other installations throughout the Marine Corps.

7. RegScan Software. RegScan is a regulatory support service which permits users to view the full text of current regulations, build installation specific checklists, and efficiently determine applicable TEAM Guide checklist questions for response in WEBCASS. The Marine Corps has a contract with RegScan software that makes it available to all Marine Corps users (including contractors supporting the Marine Corps) either online at the website or through a data CD.

8. TEAM Guide Checklists. TEAM Guide is an audit protocol/checklist that lists environmental compliance requirements and auditing guidance for Federal, state/territory, as well as overseas environmental requirements (references (g), (h), and (i)). TEAM Guide checklists are programmatically organized through a common numbering/classification system. The TEAM Guide Checklists are maintained by U.S. Army Corps of Engineer, Construction Engineer Research Laboratory, and are funded by numerous DOD and government agencies. The Marine Corps is a subscribed TEAM partner to this service, and all employees or supporting contractors with a usmc.mil common access card certificate can download applicable checklists via the [FedCenter.gov](http://FedCenter.gov) website. The Marine Corps uses WEBCASS software to record and track findings written against TEAM Guide checklist questions. TEAM Guide Checklists for Active Duty and Reserve Forces capture environmental program requirements that are unique to the Marine Corps.

a. USMC Team Guide Supplement. Supplementary questions which address DOD, DON, and Marine Corps environmental requirements for all active duty installations and commands.

b. MARFORRES TEAM Guide Supplement. Supplementary questions based on policy applicable to MARFORRES to include the MARFORRES ECPSOP.

9. WEBCASS Software. A web application to document environmental compliance and EMS conformance deficiencies and manage corrective action plans.

ENVIRONMENTAL COMPLIANCE EVALUATION PROGRAM

SECTION 2: MARINE CORPS POLICY

4200. ENVIRONMENTAL COMPLIANCE EVALUATION (ECE) PROGRAM INTRODUCTION. The Marine Corps conducts Benchmark ECEs and Self-Audits through its ECE Program. The ECE Program provides each installation a management tool to achieve, maintain, monitor, and continually improve environmental compliance and performance, and reduce environmental risks. CMC (LF) uses Benchmark ECE reports and installation POA&Ms to plan, program, budget, and execute projects to correct Benchmark ECE findings.

4201 BACKGROUND. Benchmark ECEs are conducted using Inspector General of the Marine Corps (IGMC) inspection principles. A discussion of the inspection principles is found within reference (j).

4202. GOALS. The ECE Program shall:

1. Provide installation commanders a management tool to assess, report, and correct environmental deficiencies.
2. Assess installation environmental compliance and EMS conformance and identify corrective actions to reduce environmental risks.
3. Provide installations and units a forum for exchanging environmental compliance techniques and enhancing compliance postures.
4. Provide CMC (LF) an accurate assessment of Marine Corps environmental compliance.
5. Continuously improve Marine Corps environmental compliance and program performance.

4203. WEBCASS SOFTWARE

1. Background. WEBCASS was initially developed by the Army National Guard Bureau to document environmental compliance/conformance deficiencies and manage corrective action plans. The Marine Corps conducted a business case analysis in 2008 and chose WEBCASS to be developed as the follow-on to ACE software. In 2010, the Marine Corps began a transition from ACE-Online software to WEBCASS. A MOU between the Marine Corps and the Army National Guard allows for sharing of information technology (IT) resources and development costs in order to provide improved software solutions for both organizations.

2. Purpose. WEBCASS is the primary IT component used to assess, track, and manage environmental compliance across the Marine Corps. Environmental personnel shall use WEBCASS to record installation compliance assessments. WEBCASS will also be used to track installation POA&Ms to resolve findings identified. WEBCASS interfaces with budgeting software.

3. Permissions and reports. Users will be assigned WEBCASS access and permissions based on their job requirements. Higher headquarters (for both

operational and installation hierarchy) has visibility of subordinate unit information. WEBCASS has a number of reports available for installation, command, and higher headquarter use.

4. TEAM Guide checklists. WEBCASS identifies installation environmental requirements using the TEAM Guide checklists (see definition in paragraph 4105 and usage requirements below). Each installation shall audit using checklist questions in the Federal TEAM Guide or the applicable overseas checklist (references (g), (h), and (i)), state and local requirements unique to each installation, and the USMC Team Guide Supplement or MARFORRES Team Guide Supplement, as applicable. Environmental program managers will need to determine additional local requirements. If necessary, environmental professionals and legal counsel should be consulted to interpret these requirements.

4204. BASELINE ECE SCHEDULING. CMC (LF) publishes a Baseline ECE schedule annually. The schedule establishes a three-year Baseline ECE cycle with a Benchmark ECE conducted at each installation every third year. ECEs schedules are coordinated with the installations and HQMC contractors and are difficult to change. CMC (LF) will evaluate all installation requests for waivers. Benchmark ECEs are generally scheduled for a two-week period. MARFORRES Benchmark ECEs generally last one week.

4205. BENCHMARK ECE TIMELINE SUMMARY.

1. August prior to FY: FY ECE schedule released.
2. Arrival date - 60: ECE notification to installation.
3. Arrival date - 30: installation pre-ECE checklists and point-of-contact (POC) sheets due to HQMC.
4. Arrival date - Completion Date: ECE on-site.
5. Completion date +21: installation assessments of ECE team due to HQMC (.pdf email preferred).
6. Completion date +60: installation POA&Ms due in WEBCASS.
7. Completion date +120: HQMC validation of POA&M responses and final draft of ECE report.
8. Completion date +365: installation notification POA&M annual review due to HQMC.
9. Completion date +395: HQMC validation annual review completed.

4206. CONDUCT OF BENCHMARK ECE

1. Notification. CMC (LF) shall provide each installation a two-month advance written notice of the Benchmark ECE. In this notice, the installation shall be tasked with providing pre-ECE questionnaire and POC information. The installation shall provide the requested information to CMC

(LF) at least 30 days before the Benchmark ECE begins. The installation shall also coordinate any security requirements for auditor access to the installation.

2. ECE Workplan. CMC (LF) shall use the POC list and Benchmark ECE Questionnaire provided by the installation to develop an ECE Workplan. The workplan schedule shall inform the installation when specific environmental media shall be evaluated. CMC (LF) shall give this schedule to the installation no later than two weeks before the Benchmark ECE. After receiving the media evaluation schedule, the installation POCs should contact the Benchmark ECE media evaluators to schedule site visits. The site visit schedule must give Benchmark ECE media evaluators flexibility to evaluate sites of particular interest and permit them the opportunity to evaluate each of the major units on the installation.

3. In-Brief. The CMC (LF) and contractor Benchmark ECE team leaders will conduct an in-brief with the installation commander. They shall explain the Benchmark ECE's goals and give the commander an opportunity to express any areas of concern for the evaluation.

4. Daily Updates. The CMC (LF) and contractor Benchmark ECE team will normally meet each afternoon to discuss evaluation progress, problem areas, and coordinate the next day's schedule. Installation representatives are encouraged to attend these meetings. If the Benchmark ECE schedule permits, the CMC (LF) ECE team leader may allow installation or unit staff to read media-specific portions of the Benchmark ECE draft report for their information before the out-brief with the installation commander.

5. Out-Brief. The CMC (LF) and contractor Benchmark ECE team leaders will conduct an out-brief with the installation commander and provide a copy of the Benchmark ECE draft report. The out-brief shall summarize significant findings or concerns including any that are important for the commander's awareness or that require the commander's authority to correct.

6. Document Review. Installation environmental documents shall be made available to the HQMC assessors prior to the ECE. Reviewing the documents off-site allows the auditors to maximize their time with interviews and site-visits during the ECE.

7. Benchmark ECE Reports.

a. Benchmark ECE Report. This report is a summary of the installation's environmental compliance assessment. It includes an executive summary, statistics, programmatic narratives, and details for all findings identified during the ECE. All findings are entered into WEBCASS and are deficiencies that must be addressed by the installation. In order to facilitate prioritization, findings are assigned a risk category (high, medium, or low) based on auditor discretion and a scoring system. The number of findings during the ECE is usually not a good measure of performance. Findings related to safety considerations per reference (k) may be identified during a Benchmark ECE, but there is no requirement for the auditors to do so. CMC (LF) shall prepare a Benchmark ECE Report cover letter addressed to the installation commander requiring submission of the POA&M within 60 days. CMC

(LF) will give the IGMC a copy of the Benchmark ECE Final Report.

b. Appendix F contains the Benchmark ECE Report format.

c. EMS Conformance Report. An EMS Conformance report will be developed to assess each EMS element and to determine the overall conformance of the command's EMS to Marine Corps requirements. The EMS Conformance Report will be included in the Benchmark ECE Report, will be referenced in the Benchmark out-brief, and meets the requirements for the annual EMS conformance assessment per chapter 2 of this Manual. WEBCASS automatically associates findings with the EMS elements and formats a report; alternatively, a spreadsheet format is also available.

8. Installation Feedback on Benchmark ECE. Installation staff involved in the ECE shall complete a critique of the ECE team and forward to CMC (LF) within two weeks of the out-brief.

4207. ROOT CAUSE ANALYSIS. Whenever possible, corrections for identified deficiencies should address the root cause of the deficiency. Findings generated in WEBCASS will include a root cause analysis that will assist in correcting the cause of the finding. The USMC associates its 17 EMS elements as the root cause of compliance deficiencies. This not only identifies the cause of the problem, but also helps to identify weaknesses in the command's EMS. Root cause determination is at the auditor's discretion, but needs to be justified.

4208. POA&M. An integral part of all evaluations is appropriate follow-up to ensure that corrective actions are completed. Following a Benchmark ECE, WEBCASS will be used to create a POA&M to respond to all findings identified in the Benchmark ECE Report. This POA&M will be submitted to HQMC via the installation commander. POA&Ms shall be updated using WEBCASS at least on an annual basis and available for CMC (LF) review on an annual basis. Installations shall notify HQMC when complete with their annual review the year after the Benchmark ECE.

4209. TREND ANALYSIS REPORTS. Trend analysis reports are available through WEBCASS and can be tailored as required using the available filters.

4210. RELEASABILITY

1. References (l) and (m) generally govern public disclosure of ECE Program records. Installations and units receiving FOIA requests for ECE Program records shall always consult counsel and CMC (LF) before releasing them.

2. Within the Benchmark ECE Final Report itself, the Preliminary Executive Overview, Media Overview, recommended corrective action, and installation commander and higher headquarters' comments may be subject to discretionary disclosure. Benchmark ECE Draft Reports are generally not final documents and are not normally subject to FOIA release.

3. As a matter of policy, the EPA and many states do not routinely request ECE Program records in anticipation of, or as part of, an environmental compliance inspection. If an EPA or state inspector requests these records,

the installation or unit receiving the request should immediately consult with counsel and CMC (LF) for recommendations on how to proceed.

4. Installations and units receiving requests for ECE Program records in contemplation of, or during, litigation shall always consult counsel and CMC (LF) on how to proceed.

4211. BASE REALIGNMENT AND CLOSURE INSTALLATIONS. Marine Corps installations shall participate in the ECE program until closed.

4212. MARFORRES ECE PROGRAM

1. In accordance with DOD policy, each MARFORRES tenant must adhere to the host installation's environmental instruction including the conduct of ECEs. Reserve units on non-Marine Corps sites will participate in their hosts' ECE (or equivalent) programs and establish self-audit programs tied to the MARFORRES Commanding General's Inspection Program (CGIP).

2. MARFORRES will establish an ECE Program for Marine Corps-owned/leased Reserve sites and facilities that is similar to the CMC (LF)-sponsored ECE Program. Due to the geographic spread of MARFORRES sites and the small Inspector and Instructor staffs at each MARFORRES site, the Environmental staff at MARFORRES Headquarters will be responsible for all pre-ECE coordination, POA&M development, and execution. Benchmark ECEs for the MARFORRES sites will be provided by and coordinated with CMC (LF). The MARFORRES TEAM Guide Supplement will be maintained by CMC (LF). Site-specific checklists can be generated using software with checklist building features (e.g., RegScan or ListBuilder).

3. MARFORRES Headquarters shall also participate in the HQMC ECE program; a similar benchmark ECE of the environmental management program will be conducted. This review will focus on environmental program management.

4213. SITE INSPECTIONS. Personnel authorized by the Marine Corps and possessing appropriate security clearances shall be allowed to enter Marine Corps commands and units on Marine Corps installations to conduct ECEs.

4214. SELF-AUDIT PROGRAM. The Self-Audit Program gives commanders a tool to assess their commands' environmental compliance. This program will be incorporated into the CGIP as described in reference (j). See also reference (n).

1. Installation Commanders. The installation commander's Self-Audit Program should annually assess installation environmental compliance by visiting every permitted site and source, every practice which releases pollutants to air or water, generates a waste, or may be considered a significant environmental risk, and every command/unit and tenant.

2. Other Commands

a. Non-installation commanders with inspection authority per reference (j), shall conduct annual Self-Audits within the CGIP. These commanders will use the environmental functional area checklist from the IGMC Automated

Inspection Reporting System (AIRS). While the installation commander's Self-Audit Program focuses on infrastructure and processes, the non-installation commander's Self-Audit Program shall focus on subordinate commanders' readiness, support of the commander's environmental policies, and support of the host installation's EMS.

b. Commanders with subordinate units geographically-separated that are not tenants on other DOD installations shall ensure unit responsibilities are clearly delineated and shall annually audit these units as part of the Self-ECE. These commanders may also request NAVFAC or HQMC assistance to conduct Benchmark ECEs at these locations. Commanders with geographically-separated administrative units may request an ECE Program waiver from CMC (LF).

c. Marine Corps units on closed installations shall participate in the ECE program with and under the cognizance of their higher headquarters.

3. Self-Audit Program Development. Installations must identify all significant environmental requirements and incorporate them into the Self-Audit Program. Existing environmental inspections and checklists should be incorporated into the installation Self-Audit Program where applicable. Reports, inspections, and evaluations currently being conducted in support of command environmental management programs include:

- a. Weekly HW satellite accumulation area inspections.
- b. Drinking water backflow prevention annual inspections.
- c. NPDES dry weather inspections.
- d. NEPA decision document monitoring and measurement requirements.

4. Implementation of the Self-Audit Program. Installation Self-Audit Programs shall include:

a. Annual Self-Audit Plan. A detailed Self-Audit Plan must be published each fiscal year. This annual environmental Self-Audit Plan helps determine which tenant units, subordinate units, and installation organizations, buildings, locations, and/or media areas are to be evaluated during each month. A critical path method format will help to address environmental threats with the most significant risk.

b. Self-Audit Approaches. The processes for conducting annual Self-Audits. There are three general approaches:

(1) Organizational Approach. Each installation activity and tenant unit receives a Self-Audit similar to a Benchmark ECE.

(2) Media Area Approach. The Self-Audit evaluates compliance individually by media (e.g., air and HW).

(3) Combined Organizational and Media Area Approach.

- c. A means to formally track and resolve findings identified at each

command and ensure prompt corrective action.

d. Assessment of the installation's EMS per chapter 2 of this Manual.

5. Self-Audit Records. Self-Audit records shall be maintained by the installation or command conducting the Self-Audit. Commands should review these records during the EMS review. Annual audits shall be recorded in the IGMC/CGIP Annual Inspection Report that is incorporated into AIRS.

6. Safety Coordination. While the function of the ECE is not to assess safety concerns, safety deficiencies should not be ignored when discovered. WEBCASS has current - Safety checklists based upon reference (1) available to auditors. When known safety findings are identified, they should be written, assigned to the installation Safety Office, and tracked for resolution. Since Safety and Environmental have similar oversight functions, it benefits both programs to cooperate on inspection requirements. A combined Environmental, Safety, and Occupational Health (ESOH) inspection arrangement (i.e., a coordinated inspection schedule) can minimize redundancy and conflicting guidance between the programs, reduce the burden on inspected units, and result in beneficial cross-training. Combined Safety/Environmental inspections are encouraged as appropriate to the installation.

4215. IGMC REVIEW. To assess tenant unit environmental compliance, the IGMC may use installation environmental staff to augment IGMC inspections. This provides the inspector general with auditors who are knowledgeable about local requirements, installation environmental staff an additional venue for assessing, commending, or correcting unit environmental performance. Installation level environmental programs are no longer subject to IGMC inspection under the AIRS 764 checklist due to the extensive oversight provided through the ECE program.

CHAPTER 4

ENVIRONMENTAL COMPLIANCE EVALUATION PROGRAM

SECTION 3: RESPONSIBILITIES

4300. CMC (LF)/COMMANDER MCICOM

1. Schedule and implement Benchmark ECEs at installations and MARFORRES Headquarters.
2. Facilitate augments for IGMC inspections as requested.
3. Review installations' Annual Validation of POA&M.
4. Ensure corrective actions are taken on identified issues.
5. Assess environmental compliance trends so that enterprise corrective actions can be implemented.

4301. CMC (LB). Ensure all environmental procurement requirements are included in contracts and purchasing guidelines. Inspect those requirements during financial auditing.

4302. IGMC. Assess unit environmental compliance as applicable during IGMC inspections per the AIRS (764 Environmental Management) checklists. Environmental staff at each installation or at the region level are available to augment IGMC inspections as requested. Coordinate installation contacts through the HQMC LF Environmental Compliance Officer or through the installation command inspector. Note: Oversight of installation environmental management is fully addressed through the ECE program.

4303. CG OF MCI EAST, WEST, AND PACIFIC

1. Track installation POA&M corrective actions to ensure timely completion. Ensure high risk environmental findings at installations are adequately addressed.
2. Use trends analysis, including trends data available in WEBCASS, in order to determine environmental compliance findings that affect the region and implement cost-effective solutions at the regional level.

4304. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Participate in the Marine Corps Benchmark ECE Program.
2. Establish and implement a command Self-Audit Program that annually evaluates installation environmental compliance by visiting every permitted site and source, every practice which releases pollutants to air or water, generates a waste, or may be considered a significant environmental risk, and every command/unit and tenant.
3. Publish ECE procedures as part of the installation ECPSOP.

4. Supplement the IGMC inspections with installation environmental staff as needed to assess tenant units at the installation.

5. Encourage cooperation between installation Safety and Environmental programs. When identified, follow up on safety-related findings identified through the ECE. Provide oversight of occupational safety and hazardous communication training requirements per reference (k) that are mandated by reference (o).

REFERENCES

- (a) Federal Register, Volume 51, page 25004, July 9, 1986
- (b) Department of Justice, "Factors in Decisions on Criminal Prosecutions for Environmental Violations in the Context of Significant Voluntary Compliance or Disclosure Efforts by the Violator," July 1, 1991
- (c) Federal Register, Volume 60, page 66705, December 22, 1995
- (d) Federal Register, Volume 65, page 19617, April 11, 2000
- (e) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (f) Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," October 5, 2009
- (g) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (h) DOD Japan Environmental Governing Standards, November 2010
- (i) Headquarters United States Forces Korea Pamphlet 200-1, Environmental Governing Standards (EGS), October 20, 2004
- (j) MCO 5040.6H
- (k) 29 CFR 1910
- (l) 5 U.S.C. 552
- (m) SECNAVINST 5720.4
- (n) United States Marine Corps, "Environmental Compliance Evaluation (ECE) Assistance Guide," May 2011
- (o) 40 CFR

CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

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CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

SECTION 1: INTRODUCTION

5100. PURPOSE

1. This chapter establishes Marine Corps policy and responsibilities to ensure compliance with mandatory environmental training and education requirements and standards for developing and managing environmental training instruction.

2. Responsibilities for environmental training and education cross many functional and operational areas. This chapter establishes:

a. Responsibilities for ensuring that relevant, high quality environmental training is provided at all levels of the Marine Corps.

b. Policies and procedures that apply the Marine Corps Systems Approach to Training (SAT) to the environmental training process as developed and advanced through CETEP.

c. Documentation and reporting requirements integrating Marine Corps environmental training into the EMS.

d. Professional development guidance and opportunities for Marine Corps personnel who are assigned environmental compliance responsibilities.

5101. APPLICABILITY. See paragraph 1101.

5102. BACKGROUND

1. The Environmental Training Challenge. Environmental compliance requirements impact nearly every Marine Corps occupational field (OCCFLD), MOS, and operation. Environmental training requirements are explicitly stated or strongly implied in many environmental statutes and regulations, and training is required to provide individuals the knowledge and skills to perform jobs in an environmentally responsible manner. EMS risk-based analysis further addresses significant environmental practices and identifies specific training requirements required to reduce overall risk to the environment. As a result, the broad scope of environmental training and education requirements and the numbers of Marine Corps personnel subject to them create significant challenges. These challenges are compounded by requirements to support sustainability, professional development, public information, and Federal environmental, safety, and health training tailored to local conditions.

2. CETEP. CETEP was established to address environmental training challenges; it fulfills the training requirements of the Marine Corps EMS. CETEP supports full compliance with applicable environmental requirements, facilitates P2 measures, and equips Marines with training needed to achieve EMS/sustainability objectives. CETEP accomplishes this by analyzing environmental training needs and integrating general awareness, public outreach, and EMS and compliance training into environmentally responsible

operational behaviors. CETEP meets all requirements for the environmental training component of the Marine Corps EMS.

3. Meeting Environmental Training Challenges. CETEP's primary goal is to ensure that environmental training is available, efficient, and effective at all levels of the Marine Corps. Environmental training shall:

a. Use the Marine Corps SAT to analyze, design, develop, implement, and evaluate performance and mission-oriented environmental training.

b. Be tailored to meet the CMC, COMMARFORRES, and each installation's EMS requirements.

c. Be supported by a documented assessment of the installation environmental training needs.

d. Use existing Marine Corps and DOD organizations and enterprise training support systems to include the EM Portal, Environmental Learning Management System (ELMS), and MarineNet, if applicable.

e. To the maximum extent practicable, use existing environmental training materials, courses, and resources (e.g., MarineNet, NavyOnline, Civil Engineers Corps Officer's School (CECOS), Army Logistics University (ALU), Air Force Institute of Technology Civil Engineer School, Inter-Service Environmental Education Review Board (ISEERB) classes and other online resources) rather than developing new initiatives.

f. Use non-DOD environmental training providers only when necessary.

g. To the maximum extent practicable, apply modern instructional technologies for the distribution of environmental instruction and information.

h. Provide for the professional development of Marine Corps personnel with environmental training management and/or instruction responsibilities.

i. Maximize the mobility of training courses and eliminate inappropriate or redundant training by using a top-down training requirement approach.

j. Address both compliance-driven and EMS practice/risk-based requirements with pragmatic instruction to guide Marine Corps military training and operations.

4. The SAT and CETEP

a. Formal SAT processes are applied at Marine Corps formal schools, training centers, and formal courses at other service schools. Locally-developed courses and training materials are more relevant and effective when developed with the SAT and its analysis of training requirements to job performance outcomes. For example, a locally-developed course that may result in the award of the 8056 MOS should be developed with applicable Individual Training Standards (ITS) and MOS Manual requirements. The course should also be developed to explain local procedures for compliance with applicable regulatory requirements and policies.

b. All CETEP training shall incorporate, document, and appropriately apply the SAT.

5. Environmental Training Expertise. For CETEP to succeed, environmental training expertise must be developed within all Marine Corps units and installations. Two additional MOSSs, 8831 and 8056, and CETEP Coordinator positions were established to meet this need. For more information on these standards, see paragraph 5205 of this chapter.

a. MOS 8056, HM/HW Officer/Marine. MOS 8056 (formerly MOS 9954) was established as a secondary MOS to provide the Marine Corps with uniformed Marines trained to safely and efficiently manage HM and HW, primarily at the unit level.

(1) All units should ensure that they have sufficient 8056 experience to meet operational HM and HW management requirements.

(2) HQMC has reviewed and approved three courses which partially fulfill 8056 MOS designation-training requirements. These courses are:

(a) Defense HM/HW Handling Course (Army Logistics University).

(b) Introduction to HW Generation and Handling (CECOS).

(c) HM/HW Marine (Marine Corps Institute available on MarineNet at [www.marinenet.usmc.mil](http://www.marinenet.usmc.mil).)

(d) Additionally, HQMC endorses region or installation-approved HM/HW Handling courses which meet Marine Corps SAT requirements to fulfill the 8056 MOS designation requirement.

(3) Attainment of the secondary MOS and successful performance in the additional duties should be noted in performance reports for all Marines with the MOS. Specific guidance regarding MOS 8056 qualification is published in reference (a).

b. MOS 8831, Environmental Engineering/Management Officer. MOS 8831 (formerly MOS 9631) was established as a secondary MOS and provides the Marine Corps a cadre of uniformed officers with operational experience who have been educated in environmental engineering, management, and science. 8831s serve at installation and operational staff levels in environmental compliance, management, and sustainability roles. These officers provide a unique view of environmental issues from an operational perspective.

(1) MOS 8831 is administered under the Marine Corps Special Education Program and Advanced Degree Program. Recipients of the MOS have earned a master's degree in environmental management, science, or engineering from designated colleges and universities, or meet equivalent experience requirements. More information on AMOS 8831 is included in chapter 2 of this Manual.

(2) Specific information regarding MOS 8831 is published in references (b) and (c). Installations and units should encourage qualified officers with an interest or background in environmental science or compliance to apply to the Special Education Program.

c. CETEP Coordinators. CETEP Coordinators lead Marine Corps, regional, and installation environmental training programs. CETEP Coordinator training and experience requirements are detailed in paragraph 5203.

(1) HQMC CETEP Coordinator. The HQMC CETEP Coordinator ensures that environmental training requirements are included in policy, programs, funding, and training development at the top level in order to reduce training burdens on installation commands. The HQMC CETEP Coordinator facilitates common awareness materials, develops common curricula, and facilitates information sharing among the regions and installations. CMC (LF) sponsors professional development initiatives for CETEP Coordinators to include EMS/CETEP Conferences. HQMC CETEP facilitates Marine Corps TECOM training quotas for active duty Marines to attend certain environmental training courses.

(2) Regional CETEP Coordinators. CETEP Coordinators at the regions ensure that training for all installations in the regions is being provided efficiently to installations. Regional CETEP Coordinators assist the installations in preparing CETEP Plans and training needs analyses, procuring training materials, and coordinating among installations to maximize environmental training opportunities and minimize overall training costs.

(3) Installation CETEP Coordinators. Installation CETEP Coordinators ensure all individuals who require environmental training at their installations receive it. They document, track, and schedule environmental training and evaluate its effectiveness. CETEP Coordinators shall ensure installation environmental training programs are structured to identify and address EMS, local training, and requirements mandated by Federal regulations.

6. ISEERB. The ISEERB is composed of environmental and training representatives from the military services and the DLA. The ISEERB addresses environmental training issues, and identifies training resources and efficiencies across the military and other Federal services.

a. CMC (LF) provides a Marine Corps representative to the ISEERB. This participation has permitted CMC (LF) to identify interservice environmental training courses and materials that meet Marine Corps training needs.

b. "ISEERB Approval" is an endorsement (i.e., "seal of approval") of selected environmental training courses. This approval signifies subject matter experts reviewed the courses and found them to have content suitable for DOD Component use. A list of ISEERB-approved courses is available at [www.denix.osd.mil](http://www.denix.osd.mil) in the Conferences & Training section. Installations and units should consider using these courses before contracting for or developing similar environmental training courses.

5103. FEDERAL STATUTES. Almost all environmental laws and their implementing regulations require environmental training, either by mandate or implication. Federal agencies codify their environmental training requirements in the Code of Federal Regulations (CFR). These requirements may be applicable to Marine Corps personnel in addition to applicable state environmental training requirements. Appendix G summarizes the major environmental training provisions required by Federal regulations. A list of other environmental training requirements presented in the TEAM Guide appears in appendix H.

5104. REQUIREMENTS. This chapter implements an environmental training program that meets all explicit and implicit requirements established by Federal, state, and local laws and regulations; E.O.s; and by DOD, DON, and Marine Corps policy and EMS drivers.

5105. TERMS AND DEFINITIONS

1. By Name Assignment (BNA). An automated system used for scheduling and enrolling students in courses offered by military formal schools.

2. Earth Day. Started in 1970 as a movement to raise awareness about the impacts of human activities on the earth, Earth Day is recognized on 22 April. Earth Day involvement provides outreach opportunities with local communities and organizations and general awareness training which meets CETEP general awareness education requirements. All Marine Corps installations are encouraged to host or participate in local Earth Day activities in order to promote general environmental awareness and express the Marine Corps' commitment to environmental stewardship in the local community.

3. Environmental Training Needs Assessment. A comprehensive analysis of environmental training needs that serves as a justification for allocating training resources and requests for training services. The analysis also establishes a benchmark for evaluating the efficiency and effectiveness of environmental training efforts.

4. Explicitly Required Training. Training expressly required by specific laws, regulations, or policies that apply to Marine Corps personnel due to the nature of their work assignments/job functions and/or specific licensing or certification requirements mandated by such environmental laws, regulations, or policies.

5. Implicitly Required Training. Instruction and/or information that is not expressly required by laws, regulations, or policies, but that can be reasonably inferred as being required to maintain compliance or that is determined through EMS to reduce overall environmental risk.

CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

SECTION 2: MARINE CORPS POLICY

5200. ENVIRONMENTAL TRAINING AND EDUCATION POLICY. Marine Corps personnel, the greater Marine Corps community, and appropriate segments of the public will be provided relevant environmental information and EMS, education, and training. All environmental training will be documented and managed to ensure that it meets Marine Corps quality standards and complies with applicable environmental requirements to include EMS requirements stated in chapter 2 of this Manual.

5201. COMPREHENSIVE ENVIRONMENTAL TRAINING AND EDUCATION PROGRAM (CETEP) IMPLEMENTATION

1. Required CETEP Components. Installations must provide specific and general awareness training, as appropriate, to ensure all personnel operating aboard the installation understand their environmental responsibilities and can support environmental policies and programs. To ensure that all environmental training needs are appropriately identified and addressed, each installation, region, CMC (LF) and Marine Corps Forces Reserve (MARFORRES) shall establish a CETEP. The CETEP should be integrated into the EMS and shall contain the following components:

a. Environmental General Awareness Component. Individual awareness of environmental policies and programs is a prerequisite to attaining environmental compliance and sustainability goals. Therefore, each installation's CETEP shall include an environmental education component that is sufficient in scope to provide persons within the installation and surrounding community information about the installation's environmental policies and programs. This component satisfies the Marine Corps EMS General Awareness conformance criteria when properly executed.

(1) The CMC (LF) CETEP supports a Marine Corps-wide environmental education program that creates and distributes environmental education materials (e.g., posters, videos, booklets, web pages, and displays) that can be used to raise awareness of, and provide information about, Marine Corps environmental programs. These materials target different audiences and are suitable for use locally as a training aid or as general awareness materials. CMC (LF) provides guidance on Earth Day involvement in order to address high priority general awareness issues and foster a strong and consistent Marine Corps message.

(2) Installations should incorporate CMC (LF) environmental education materials to the maximum extent practicable into their CETEP environmental education component. Inter-installation (i.e., joint, regional) development and use of environmental education materials is also highly encouraged. CMC (LF) will maintain a listing of all Marine Corps-developed environmental educational materials. Contact the HQMC CETEP Coordinator to access these materials. Environmental education materials should be routinely evaluated for updates and to ensure their validity and effectiveness.

(3) Information on installation ecological concerns and high risk environmental practices shall be addressed at all new arrival check-in

briefings, preferably by a member of the installation environmental staff. Installations should include environmental awareness materials in local outreach efforts such as military family Welcome Aboard briefings, base paper articles, Earth Day celebrations, and events involving the surrounding community in which the installation is a participant and/or sponsor.

(4) Handout Items in Support of CETEP General Awareness requirements. Methods to effectively raise and maintain awareness of USMC environmental programs may include the distribution of handout items in conjunction with general awareness initiatives to include Earth Day, school visitations, and other public events. Because of established fiscal limitations on the use of handouts, local approval should be sought before procuring handout items. Potential handout items should demonstrably promote a mission goal, such as raising awareness of specific environmental programs or issues. Items that provide specific environmental program information, web links to program websites or that promote installation-specific issues shall be used. Potential handout items shall also be inexpensive, with little or no independent commercial value. Examples of appropriate handout items include pens, pencils, awards such as medals for children participating in environmental contests, playing cards (with environmental and sustainability themes), drink holders, stickers, educational CDs, and other low-cost reusable items meant to be given to Marines, civilians on base or in housing, and people in the local community as part of an outreach or general awareness program. Guidelines: Generally, articles for distribution shall be inexpensive and will not be articles that an individual would purchase commercially. The articles must help in meeting a mission-related goal.

b. Environmental Job-Specific Training Component. This CETEP component ensures personnel assigned environmental job responsibilities or job functions that may have a significant impact on the environment, as identified through the installation EMS and compliance requirements, receive appropriate environmental training. No Marine or civilian employee should be assigned job responsibilities subjecting them to environmental training requirements without appropriate prior training. These environmental training requirements should include:

(1) Explicit Training and/or Information Requirements. Appendix G summarizes significant environmental training requirements included in Federal regulations and Marine Corps policy. Failure to provide this type of training is a compliance violation that could result in regulatory action against the Marine Corps. These training requirements vary in length, content, and required topics depending on the job functions performed.

(a) Practice-specific training. EMS identifies explicit training requirements to address practices with significant environmental risk. CETEP coordinators should refer to the installation's prioritized practices/aspect/impact list to determine which job functions require EMS practice training. High risk practices shall receive priority.

(b) Training requirements shall be included in position/billet requirements.

(2) Implicit Training and/or Information Requirements. Implicit training ensures personnel understand and are able to perform their job functions in an environmentally sound manner. Implicit training requirements should be identified in turnover folders and in SOPs for each practice. This

training is often provided informally at the unit or shop and is also referred to as point-of-use training.

c. Leadership Education Component. This CETEP component ensures senior Marine Corps civilian and military leadership understand their environmental program responsibilities.

(1) CG/CO and Senior Executive Service (SES) Education. Environmental compliance and EMS responsibilities shall be part of the in-briefing each CG/CO receives upon assuming command of an installation. These responsibilities include an awareness of, and access to, environmental compliance publications for ensuring operations comply with environmental requirements and achieve stated EMS objectives. These publications include this Manual, the latest editions of references (d), (e), and installation environmental orders and policies (e.g., base orders, air station orders, 5090, ESOPs, and applicable base plans to include CETEP Plan and EMS Manual). SES and other command staff (Chief of Staff, Assistant Chiefs of Staff G-3, G-4, Safety, Facilities Directors) shall also receive environmental education pertinent to their positions and duties.

(2) Environmental responsibilities shall be part of the brief each battalion/squadron commander receives upon assuming command.

(3) Marine Corps CGs/COs and SES members should be aware of and participate in environmental training and education opportunities and encourage subordinates to participate.

(4) Visiting Units. Commanders of each unit visiting an installation shall be informed of their environmental responsibilities before conducting unit operations (e.g., training) on the installation. These responsibilities shall be included in any written agreements between the unit and installation and should be included in range regulations.

2. CETEP Execution. The installation CG/CO or designated appointee shall review and approve the CETEP plan. An electronic copy of the CG/CO's approved plan shall be posted on EM Portal under the installation's CETEP Program (Training).

## 5202. CETEP PLANS

1. CETEP Plan Overview. A CETEP plan is an installation-specific plan that inventories positions and populations that require environmental training and/or information and details the installation's cost effective strategy to provide each training requirement to the targeted population. The CETEP plan serves as a planning and management tool for meeting the environmental training challenge, compliance and P2 goals, and EMS objectives and should be updated as necessary to achieve these purposes. The CETEP shall be referenced appropriately by an implementing base order and the installation EMS Manual.

### 2. Required Sections

a. Training Needs Analysis. This section identifies and updates installation environmental training requirements. New regulatory requirements, prioritized practices/aspects/impacts list, and the results of the annual installation EMS and compliance self-audits should be reviewed to

refine the training requirements and course content, as appropriate. The Training Needs Analysis contains, but is not limited to:

(1) Demographic Information. Demographic information shall describe and quantify the personnel in target populations whose job functions or association with the installation may require environmental training or information by one of the CETEP components. Relevant items include the total number of military and civilians assigned to the installation, major units and tenants, base housing populations, schools within the installation boundary, local community populations, and routine visiting units.

(2) Installation Environmental Characteristics. Installation environmental characteristics shall describe installation-specific areas, activities, operations, and plans that may trigger environmental training requirements. Relevant information to consider includes the HW generator status, number of less than 90-day and satellite accumulation areas, HS and petroleum stored, proximity to water bodies, sources of potable water, amount of petroleum products transferred over water, emergency response capability, and unique local requirements. This section should relate the environmental characteristics to the associated training requirements in all CETEP components.

(3) Quantified Environmental Training Requirements. Quantified environmental training requirements shall include a list of the number of positions/billets or total populations subject to each of the identified Federal, state, local and Marine Corps environmental training requirements referenced in appendix G and applicable chapters of this Manual. This section should also estimate the annual training requirement considering the number of personnel who have not yet received the training and military/civilian turnover rates.

b. CETEP POA&M. The CETEP POA&M describes the installation's detailed strategy for meeting the environmental training requirements identified. The CETEP plan should identify instructional strategies, delivery methodologies, and environmental training sources for each training requirement and demographic group identified. The POA&M should identify significant required resources (e.g., funding, instructor manpower, classrooms, and computers) and a schedule to achieve full compliance with all training requirements identified.

c. Quality Assurance. This section establishes installation procedures for ensuring that all environmental training identified in the CETEP plan is valid, relevant, and meets Marine Corps training quality standards. The procedures should include processes for reviewing and approving proposed course content, student and instructor course completion evaluations, and instructor qualifications.

d. Recordkeeping. This section describes procedures to properly document the environmental training identified in the CETEP plan.

e. Training Efficiencies. This section describes procedures for ensuring environmental training is provided at the best possible value. The procedures should:

(1) Discuss the use of centrally-provided courses and course materials.

(2) Use ISEERB, military service, and government agency training resources.

(3) Document factors considered in decisions to use or develop other training resources or commercial courses.

(4) Document estimated cost savings through use of distance learning or other innovative instructional delivery technology.

(5) Document efforts taken to remove unnecessary course overlap (i.e., redundancy).

(6) Discuss collaborative efforts among installation tenant organizations.

f. Implementing Orders. This section lists and describes installation orders and policies implementing the CETEP Plan.

#### 5203. CETEP COORDINATORS AND ENVIRONMENTAL INSTRUCTORS

1. Personnel developing and/or implementing an installation CETEP shall be appointed as CETEP Coordinators. Within 12 months after the date of appointment, each CETEP Coordinator must satisfactorily complete the following training requirements:

a. The SAT online course offered through the College of Continuing Education and available through the Marine Corps online training portal, MarineNet, at [www.marinenet.usmc.mil](http://www.marinenet.usmc.mil) (NOTAL).

b. The Formal School Instructor's Course (or equivalent) offered by TECOM if:

(1) Developing original curriculum or modifying existing curriculum greater than four classroom hours in length;

(2) Contracting for the development or modification of existing curriculum greater than four classroom hours in length; or

(3) Developing any computer-based training courseware.

c. The Practical Applications for Environmental Management Course (or equivalent) taught by the Naval School, CECOS, Port Hueneme, California; or serve two years on a Marine Corps staff in a billet with supervisory authority over multi-media environmental programs.

2. CETEP Coordinators may obtain information about required training courses from CMC (LF) and the BNA System per reference (f). CMC (LF) shall individually consider requests for waivers from CETEP Coordinator training requirements.

3. CETEP Coordinators should participate in CMC (LF)-approved CETEP Coordinators' workshops, seminars, task forces, and committees.

4. Before being designated an Environmental Instructor, personnel (other than those with duties limited to presenting environmental awareness information) must demonstrate a mastery of the environmental training subject

and possess, at a minimum, basic instructor skills. To demonstrate basic instructional skills, personnel must satisfactorily complete the following training requirements:

a. Complete the Instructor Training Course (or equivalent) offered by the Marine Corps Instructional Management Schools.

b. Possess a minimum of one-year work experience in a position directly related to the environmental training subject, or complete formal training on the environmental training subject equivalent to no less than 15, six-hour training days at a Marine Corps/DOD service school, college, or university.

c. Instruct at least two sessions of Marine Corps students on the environmental training subject. The students' instructor ratings must average at least "satisfactory" in all areas.

d. Possess a letter of recommendation from the CETEP Coordinator that is favorably endorsed by an installation environmental director, officer, or supervisor within the chain of command of the person requesting Environmental Instructor designation.

5. The installation CETEP Coordinator may individually consider requests for waivers from Environmental Instructor designation requirements.

5204. UNIVERSAL ENVIRONMENTAL TRAINING. Environmental requirements will be appropriately incorporated into all Marine Corps training. Marine Corps personnel will be trained to perform their occupational specialties and maintain their combat readiness in a manner supporting Marine Corps environmental goals.

5205. ENVIRONMENTAL TRAINING QUALITY STANDARDS

1. Marine Corps environmental training shall:

a. Meet Marine Corps needs and follow an installation CETEP.

b. Training courses in excess of four hours shall consist of a POI with a syllabus, administrative guide, outline, or an equivalent document that clearly and concisely describes the training. At a minimum, the POI shall identify course training and training resource requirements and include:

(1) Course content and associated learning objectives.

(2) Time allocations.

(3) Instructional sequences of events.

(4) Student and instructor course evaluation procedures (where appropriate).

(5) A test, on-job-assessment, or other validation measure to ensure that training has met its objectives.

2. CMC (LF) will monitor installation environmental training content for potential Marine Corps-wide application.

3. Installations shall maintain complete and accurate environmental training evaluations and records for at least three years after their effective date.

CHAPTER 5

ENVIRONMENTAL TRAINING AND EDUCATION

SECTION 3: RESPONSIBILITIES

5300. CMC (LF)/COMMANDER MCICOM

1. Provide support to Marine Corps installations and units by interpreting Federal environmental training and education requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
2. Provide liaisons with regard to environmental training and education with Marine Corps Combat Development Command, other Marine Corps commands and units, the DOD, other military services, private and public institutions, agencies, and organizations.
3. Fully implement all components of CETEP at the HQMC level, to include:
  - a. Developing and distributing Marine Corps-wide environmental training and education materials.
  - b. Maintaining a listing of all CMC (LF)-developed environmental training and education material.
  - c. Reviewing Marine Corps-wide job-specific guidance documents and training materials to ensure that environmental requirements are incorporated as appropriate.
  - d. Guiding and monitoring CETEP at all Marine Corps installations and MARFORRES.
  - e. Assessing Marine Corps-wide environmental training and education needs and remedies.
  - f. Monitoring Marine Corps environmental training costs and validating associated funding requirements.
  - g. Promoting the professional development and career advancement of environmental personnel (e.g., obtain environmental training quotas and conduct periodic CETEP Coordinator meetings).
4. Serve as the MOS Specialist for environmental MOSs. Advise other MOS Specialists and community managers regarding environmental compliance responsibilities.
5. Secure quotas to Marine Corps, the DOD, and other service-supported/funded professional development programs and environmental courses for Marine Corps personnel with assigned environmental responsibilities.
6. Assess the effectiveness and adequacy of the Marine Corps CETEP through the ECE Program, augmentation to the IGMC, and special reviews.
7. Research and employ existing and emerging training technologies, information transfer systems, and curricular innovations to expedite environmental training and to affect program efficiencies.

8. Provide EMS Lead Auditor Training or appropriate supplements to all Marine Corps installations.

5301. CG OF MCI EAST, WEST, AND PACIFIC

1. When established, coordinate appropriate regional training opportunities and initiatives to ensure relevant EMS and environmental training and information is available to support cost effective implementation of all components of installation CETEPs.

2. Designate a CETEP Coordinator for the region with the following responsibilities:

a. Conduct training needs assessments to identify significant regional occupational groups to develop and implement strategies that address environmental training deficiencies.

b. Develop and manage regional CETEP goals and resources to eliminate redundancy, achieve economies, and maximize regional environmental training efficiencies and effectiveness.

c. Develop Regional CETEP plans and policies that align with HQMC Environmental goals and support installation-specific CETEP needs.

d. Develop relevant and engaging training programs, utilizing appropriate instructional strategies and settings (E.G. CBT, class room training, webinars, conferences, etc.)

e. Utilize the online ELMS, USMC installation websites and Marine Net (as applicable to deliver distance learning).

f. Monitor installation CETEP ECE results and POA&M, and implement corrective regional solutions where possible.

g. Review Regional CETEP statements of work to eliminate redundancy and achieve economy of scale cost reductions.

5302. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Attend a commander's environmental orientation briefing after assuming command.

2. Ensure that no Marines or civilian employees are assigned job responsibilities without the appropriate required environmental training certification. Ensure that position descriptions and or work plans and turnover folders reflect mandatory environmental training requirements.

3. Designate an installation CETEP Coordinator to ensure units on base are provided and receive appropriate environmental training. Develop and implement programs required to support the installation CETEP.

4. Ensure that CETEP Coordinators and installation Environmental Instructors are appropriately trained.

5. Develop, implement, and maintain a CETEP Plan that specifically addresses the environmental training requirements of this Manual. Review the CETEP Plan annually as part of EMS management review and update as necessary to maintain an efficient and effective environmental training program.
6. Ensure that all forms of training (including operational exercises) conducted within the geographic boundaries of the command include environmental elements as appropriate.
7. Use centrally provided training, online sources, and mobile training teams to the maximum extent in order to reduce training costs. Nominate candidates to receive CMC (LF) centrally-provided environmental training as available.
8. Ensure that all Marine Corps personnel receive applicable EMS and environmental awareness information on at least an annual basis.
9. Plan, program, budget, execute, and track installation EMS and environmental training costs.

5303. MARINE CORPS UNIT COMMANDERS

1. When practicable, attend a commander's environmental orientation briefing after command selection. Consult installation environmental staff as needed concerning unit environmental requirements.
2. Ensure unit personnel subject to environmental training requirements are appropriately trained and that training requirements are listed in their job descriptions.
3. Designate a unit ECC (E-5 or above or other individual with sufficient authority to implement environmental requirements at the command) to communicate with the installation CETEP Coordinator and to oversee unit environmental requirements. Ensure the individual can remain in the position for at least one year. To the maximum extent practicable, use of individuals with AMOS 8056 is encouraged when filling this billet.
4. Plan, program, budget, execute, and track unit environmental training costs.
5. Propose candidate nominations to the installation CG/CO for CMC (LF) centrally-provided environmental training.

5304. ENVIRONMENTAL COMPLIANCE COORDINATORS (ECCs). ECCs are also known as Unit Environmental Coordinators (UECs) at many installations. ECCs shall:

1. Be an E-5 or above or other individual with sufficient authority to implement environmental requirements at the command, and be appointed for at least one year in this role.
2. Complete ECC's CBT course on Marine Net (or similar certified course) prior to assignment.
3. Ensure Marines in the unit who require environmental training receive it. Coordinate with the installation CETEP Coordinator to schedule environmental training and report training status.

4. Coordinate with installation environmental representatives as required to ensure all environmental requirements at the unit are being sufficiently addressed. Complete applicable unit environmental checklists to ensure environmental compliance requirements are satisfied. Report problems up the chain of command.

5. ECCs may be dually designated as HM/HW Representatives, but there is no requirement to do so.

5305. UNIT HM/HW HANDLERS. HM and HW presents the most prevalent environmental risk in the Marine Corps. All individuals who manage Hazardous Waste Accumulation Points or satellite accumulation sites require appropriate training to meet requirements per references (g) and (h). Individuals managing these waste sites shall:

1. Complete the installation's certified HM/HW Handler course within 60 days of assignment to duties involving the management of HW. If training per references (g) and (h), or applicable regulations for overseas installations, has already been completed (CECOS, ALMC, other certified installation course), only local training and annual refresher training is required. If not yet qualified, duties may be performed under the direct supervision of a properly trained individual.

2. Complete annual refresher training.

3. Optionally enroll as an additional MOS 8056 HM/HW Handler Marine.

4. Ensure unit HM/HW are handled properly. Report problems through the unit ECC or chain of command.

5306. MARINE CORPS OCCFLD/MOS SPONSORS. Ensure that OCCFLD and MOS ITS, guides, and manuals include environmental compliance responsibilities, as appropriate.

5307. ALL MARINE CORPS PERSONNEL

1. Perform job responsibilities in an environmentally sound and responsible manner per training received and SOPs.

2. Notify immediate supervisors of personal environmental training requirements and request appropriate environmental training.

3. Participate in installation general awareness training and EMS training as appropriate.

REFERENCES

- (a) MCO 1200.17
- (b) MCO 1520.9G
- (c) MCO 1560.19E
- (d) United States Marine Corps, "Commander's Guide to Environmental Management", PCN 50100459300
- (e) United States Marine Corps, "USMC Environmental Campaign Plan," PCN 50100380700
- (f) MCO 1553.7
- (g) 42 U.S.C. 6901 et seq.
- (h) 29 CFR 1910 subpart H

CHAPTER 6

AIR QUALITY MANAGEMENT

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CHAPTER 6

AIR QUALITY MANAGEMENT

SECTION 1: INTRODUCTION

6100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with air quality and emissions requirements for stationary, mobile, and fugitive sources of emissions consistent with the reference (a), DOD and DON policy, and Marine Corps policy and guidance.

6101. APPLICABILITY

1. See paragraph 1101 regarding applicability of Federal, state, and local laws, regulations, and ordinances to Marine Corps active and reserve installations and activities, generally. Reference (a) applies to installations and activities throughout CONUS, as well as within the territories and possessions of the United States to include the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.
2. Chapter 7 of this Manual provides in-depth coverage of the various statutes, regulations, and policy applicable to emergency planning and response requirements. Chapter 7 includes CAA section 112(r) requirements relating to prevention of accidental releases of hazardous and extremely hazardous substances (EHSs) including Risk Management Plans (RMPs), as well as the General Duty clause. In addition, it covers the annual air emissions reporting requirements under the Toxic Release Inventory (TRI) provisions of reference (b) and release reporting requirements regarding EHSs.
3. Marine Corps policy and guidance on management and use of ozone depleting substances (ODS) and the ODS reserve is addressed in reference (c). The ODS emission reduction requirements of leak detection and repair or required replacement of refrigeration and comfort cooling equipment, recovery and reclamation, certification of recovery equipment and technicians, and recordkeeping and reporting appear in this chapter.
4. Radon policy, as specified in this chapter, also applies to overseas installations.
5. The Marine Corps Asbestos Safety Program and workplace policy to eliminate or limit potentially harmful exposure to asbestos is covered in reference (d). This chapter covers the requirements and policy regarding compliance with the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAPs) as described in subpart M of reference (e).

6102. BACKGROUND. Early efforts to control air pollution were predominantly state and local actions taken under public nuisance laws and ordinances to reduce visible smoke emissions or abate noxious odors. By the early 1960s, it was apparent that most state and local efforts were inadequate and air pollution episodes in several major cities, which reportedly caused thousands of deaths, and increased public pressure for a nationwide, Federal air pollution program. While the early opacity and odor laws and regulations

remain available for local governments, and in some cases private citizens, to take actions to abate air pollution under nuisance theories, the vast majority of air pollution control laws and regulations today are the result of requirements driven by reference (a). The first Federal air pollution law was passed in 1955, but its primary purpose was to provide financial assistance to the states to study the problem and develop local solutions. In 1963, Congress enacted reference (a), which was the first Federal air pollution control law with any type of enforcement mechanism - procedures to control interstate air pollution. Reference (a) was amended in 1967, 1970, 1977, and again in 1990. Reference (f) laid the foundation for the modern version of reference (a). Reference (f) together with reference (g) and, particularly reference (h), resulted in what is widely regarded as the most comprehensive, complex, stringent, and technology-forcing environmental law ever enacted by Congress. Reference (a) primarily regulates three major categories of pollutants: criteria pollutants, hazardous air pollutants (HAPs), and stratospheric ODSs. Reference (f) established a Federal, state, and local partnership to control air pollution. The states were required to bear the primary implementation and enforcement responsibility for programs developed under the direction and oversight of the recently created EPA. Reference (a) divides the Nation into air quality control regions (AQCRs) and requires EPA to develop and monitor primary and secondary National Ambient Air Quality Standards (NAAQS) for criteria pollutants within those AQCRs to protect the public health and general welfare, respectively. Each state must achieve or maintain these standards by developing a State Implementation Plan (SIP) that outlines how each AQCR will attain or maintain the NAAQS for EPA. In turn, air emission sources are required to comply with the abatement and control measures set forth in the individual SIPs that are designed to achieve or maintain the standards. Reference (a) also requires EPA to develop and implement national uniform standards for HAPs and NESHAPs as described in reference (e) to protect public health, national uniform emission standards for newly manufactured motor vehicles and nonroad engines and vehicles, and to develop control programs for ODSs to protect the stratospheric ozone layer.

6103. FEDERAL STATUTES

1. CAA of 1963, as amended (42 U.S.C. 7401 et seq.)

a. The 1990 Amendments to the CAA. The 1990 Amendments to the CAA contained six titles. Titles I-III amended subchapters I-III of the existing CAA and Titles IV-VI contained major additions to the Act. The 1990 amendments introduced sweeping changes including, but not limited to, the following:

(1) Additional SIP provisions and reclassification of ozone, carbon monoxide (CO), and particulate matter (PM) nonattainment areas as well as additional SIP provisions for sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead (Pb) nonattainment areas.

(2) Additional mobile source controls for nonattainment areas including transportation control measures and enhanced vehicle inspection and maintenance (I/M) requirements.

(3) Regulation of 190 initially listed HAPs with technology, instead of risk-based standards.

(4) The acid rain program under Title IV, a cap and trade program to control emissions of SO<sub>2</sub> and oxides of nitrogen (NO<sub>x</sub>) from electric utilities for acid deposition control.

(5) A requirement for a Federal operating permit under Title V, incorporating all Federally-applicable requirements at major stationary sources.

(6) Enhanced EPA and DOJ enforcement authority, as well as expanded provisions for enforcement of emission standards or limitations through citizen suits. In the everyday jargon of air quality program professionals, the major programs under the CAA are often referred to by the title of the 1990 Amendments that changed or added the program. For example, the Federal operating permit requirements added to Subchapter V of the CAA is commonly referred to as the Title V Operating Permit program.

b. The CAA as Amended. The CAA, as amended, is divided into six subchapters as follows (see also table 6-1):

(1) Subchapter I - Programs and Activities. This subchapter contains, among others, the provisions for establishment of AQCRs; the NAAQS for criteria pollutants; SIPs to attain or maintain the NAAQS; New Source Performance Standards (NSPS); the NESHAP program; the recordkeeping, entry and inspection, and Federal enforcement provisions; and the waiver of Federal sovereign immunity in part A. Part C contains the provisions for New Source Review (NSR) in nonattainment areas, the Prevention of Significant Deterioration (PSD) program in attainment areas, and the Visibility Protection program. Part D, subpart 1, contains the general provisions for criteria pollutant nonattainment areas, including the General Conformity requirement for Federal agencies discussed below. Part D, subparts 2-5, contains the additional SIP provisions required for criteria pollutant nonattainment areas added by the 1990 Amendments discussed in paragraph 6103.1a(1) above. As a general rule the Subchapter I statutory provisions primarily establish requirements that apply to stationary sources and, to a lesser extent, fugitive sources of emissions of criteria pollutants and HAPs. Fugitive emissions are emissions that are not controlled by a stack, vent, or other pollution control device, such as the dust created by construction or demolition activities or emissions caused by prescribed burning of vegetation. One exception to this general rule appears in the implementation of the General Conformity provision for Federal actions, which in practice applies predominantly to fugitive emissions and mobile source emissions from Federal actions in nonattainment or maintenance areas.

(2) Subchapter II - Emission Standards for Moving Sources. This subchapter contains the provisions for national uniform standards for newly manufactured motor vehicle engines and nonroad engines and vehicles. It also contains the provisions relating to aircraft emission standards and the clean fuel vehicle requirements for centrally fueled and Federal agency fleets. As its title suggests, this subchapter applies to mobile sources of emissions.

(3) Subchapter III - General Provisions. This subchapter contains, among others, CAA general definitions, citizen suit provisions, and provisions for judicial review of the EPA's promulgation of the NAAQS.

(4) Subchapter IV-A - Acid Deposition Control. This subchapter contains the cap and trade program requirements for fossil-fuel fired electric utility emissions of SO<sub>2</sub> and NO<sub>x</sub>.

(5) Subchapter V - Permits. This subchapter contains the requirements for the so-called Title V Operating Permit program. The provisions of this permit program apply predominantly to stationary sources of emissions and, in some cases, fugitive emissions.

(6) Subchapter VI - Stratospheric Ozone Protection. This subchapter contains the provisions for the phase-out of certain ODSs, national recycling and emission reductions of ODSs, and the requirements applicable to servicing motor vehicle air conditioners.

c. Section 107 of the CAA (42 U.S.C. 7407). This section requires the EPA Administrator to designate interstate and intrastate AQCRs, in consultation with the states, for attainment and maintenance of the primary and secondary NAAQS. The section also expressly provides that states have primary responsibility for assuring air quality within their jurisdiction and directs the submission of SIPs that demonstrate how the NAAQS will be achieved and maintained.

d. Section 110 of the CAA (42 U.S.C. 7410). This section prescribes the requirements for preparation, submission, and revision of SIPs for the primary and secondary NAAQS established for criteria pollutants. SIPs implement pollution control programs such as NSPS, PSD, nonattainment NSR, the General Conformity requirements for Federal actions, and Federal operating permit requirements under Subchapter V of the CAA, the so-called Title V Operating Permit, at the state and local levels. Approved SIP requirements are also enforceable by EPA. Generally, states may require pollution control and prevention measures that are more stringent than those mandated by EPA, but they may not allow less stringent measures. Federal agencies must comply with all Federal, state, and local air pollution control regulations.

e. Section 111 of the CAA (42 U.S.C. 7411). This section contains the requirement for EPA to establish, and the states to implement and enforce, NSPS for certain categories of stationary sources.

f. Section 112 of the CAA (42 U.S.C. 7412). This section contains the initial list of 190 HAPs added by the 1990 Amendments along with extensive requirements for the completely revised NESHAPs program.

g. Section 113 of the CAA (42 U.S.C. 7413). This section contains the Federal enforcement provisions including civil administrative, civil, judicial, and criminal enforcement for violations of the Act's requirements.

h. Section 114 of the CAA (42 U.S.C. 7414). This section provides EPA the authority to require periodic or continuous recordkeeping and monitoring

by regulated entities, as well as compliance certifications, and it provides EPA or delegated states broad authority to enter facilities and conduct compliance inspections.

i. Sections 118(a)-(d) of the CAA (42 U.S.C. 7418(a)-(d)). These sections generally waive the Federal Government's sovereign immunity with respect to Federal, state, and local air pollution control laws and regulations; grants the President exemption authorities; and requires fleet and employee vehicles to comply with I/M program requirements in certain nonattainment areas. As a result of this waiver, Marine Corps activities are fully subject to the substantive and procedural requirements of Federal, state, and local air pollution control laws, including permitting requirements, and must obey compliance orders issued through administrative or judicial processes. Section 118(b) authorizes the President to exempt any Federal emissions source, with a few exceptions, from requirements of the Act up to one year. It also authorizes the President to grant a regulatory exemption for up to three years from the requirements of the Act for any weaponry, aircraft, vehicles, or other categories of equipment owned by the Armed Forces of the United States. With either exemption, the President must determine that it is in the paramount interests of the United States to grant such exemption. Section 118(c) requires Federal Government fleet vehicles to comply with the provisions of an approved I/M program in ozone or CO nonattainment areas designated under subparts 2 or 3 of part D of subchapter I of the CAA. Section 118(d) requires that Federal agencies ensure that their employees operating their motor vehicles on Federal facilities comply with the I/M requirements in the same ozone and CO nonattainment areas.

j. Sections 160-169 of the CAA (42 U.S.C. 7470-7479). These sections contain the requirements for SIPs in attainment areas and the provisions for the PSD program preconstruction and operating permit requirements for major emitting facilities in such areas. The PSD program requires new or modified major emitting facilities, as defined in the CAA and implementing regulations, to seek preconstruction authorization and to apply the Best Available Control Technology (BACT) to receive a final permit to operate the source(s). Source categories expressly listed in section 169 are major if their potential to emit (PTE) is equal to or greater than 100 tons per year (tpy) of any regulated pollutant. All other sources are major if their PTE is equal to or greater than 250 tpy of a regulated pollutant under the CAA.

k. Section 169A of the CAA (42 U.S.C. 7491). This section sets out the Visibility Protection requirements applicable to Federal Class I areas such as national parks, wilderness areas, and national monuments.

l. Section 173 of the CAA (42 U.S.C. 7503). This section established the general preconstruction review program, called nonattainment NSR, for all nonattainment areas designated under subpart 1 of part D of subchapter I. New or modified major stationary sources are required to obtain preconstruction authorization and install the Lowest Achievable Emission Rate (LAER) technology to obtain a permit to operate the source. Major stationary sources under subpart 1 of part D are sources with a PTE equal to or greater than 100 tpy or more of the nonattainment criteria pollutant.

m. Section 176 of the CAA (42 U.S.C. 7506). This section contains the

General Conformity requirements that prohibit Federal agencies from engaging in or approving any activity in any nonattainment or maintenance area that does not conform to the SIP.

n. Sections 181-190 of the CAA (42 U.S.C. 7511-7513b). These sections prescribe the additional SIP requirements, added by the 1990 Amendments as subparts 2, 3, and 4 of part D to subchapter I, applicable to ozone, CO, and PM nonattainment areas. The detailed statutory requirements establish various degrees of severity for these nonattainment areas, depending upon their design value, and impose increasingly more stringent requirements for each more serious classification. The thresholds for determining major stationary sources under the additional SIP provisions vary according to the degree of nonattainment. More specific detail of the requirements applicable to these various classifications of nonattainment areas is provided in paragraph 6104.10.

o. Section 209 of the CAA (42 U.S.C. 7543). This section preempts all states from enforcing emission standards on new motor vehicles and engines, unless the state had its own comprehensive emission controls in place before March 30, 1966. Originally, California was the only state that was not preempted under this provision regarding motor vehicles. Several other states have applied for, and received, authorization to enforce California standards (New York, Pennsylvania, and Florida among others). This section also preempts state regulation of nonroad engines and vehicles, except in California or other states whose standards are identical to California.

p. Section 302 of the CAA (42 U.S.C. 7602). This section contains the definitions applicable to the entire Act, except where a definition contained in another subchapter expressly provides differently for that Subchapter. For example, the definition of major stationary source and major emitting facility in section 302 is a source that has PTE of 100 tpy or more of any pollutant, whereas the PSD program definitions (discussed above) provide that non-listed major emitting facilities are those with PTE of 250 tpy or more of any air pollutant.

q. Section 304 of the CAA (42 U.S.C. 7604). This section authorizes citizen suits for certain violations of the CAA and establishes various prerequisites to such suits.

r. Sections 501-507 (42 U.S.C. 7661-7661f). This section provides the definitions and requirements applicable to the Federal Operating permit applications and operating permits for major stationary sources.

s. Section 601 (42 U.S.C. 7671). This section provides the definitions for the subchapter VI requirements to protect the stratospheric ozone layer.

t. Section 608 (42 U.S.C. 7671g). This section contains the recycling and emissions reduction requirements that apply to the repair, service, or disposal of various appliances containing ODSs.

u. Section 609 (42 U.S.C. 7671h). This section provides the requirements applicable to servicing motor vehicle air conditioners.

2. Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C. 11001 et seq.). This Act, also known as Title III of the Superfund Amendments and Reauthorization Act (SARA), in addition to the CAA, addresses the release of HS into the environment through annual TRI reporting, and also requires the release reporting of certain EHSs to the environment. Certain chemicals subject to the HAPs and risk management provisions of CAA section 112 are also subject to the EPCRA. See chapter 7 of this Manual for detailed requirements.

3. The Alternative Motor Fuels Act (AMFA) of 1988, as Amended (Public Law 100-494). Congress passed AMFA in 1988 to achieve long-term energy security and to improve air quality. Under AMFA, a portion of the new vehicles the Federal Government acquires each year must be AFVs in order to encourage the production of these vehicles for consumer use.

4. The Energy Policy Act (EPACT) of 1992 (Public Law 102-486). EPACT seeks to enhance the Nation's long-term energy security by reducing dependency on imported oil and by improving energy efficiency. EPACT establishes a Federal leadership strategy that encourages automobile manufacturers and fuel suppliers to expand the commercial availability of alternative fuels and vehicles. Under EPACT, Federal agencies must acquire increasing numbers of AFVs.

5. Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. 2601 et seq.). In TSCA, the section on Indoor Radon Abatement requires Federal departments to conduct a study of radon levels in Federal buildings and to provide results of the study to EPA. EPA has submitted to Congress a consolidated report on radon levels in Federal buildings. Congress presently is considering new legislation for Federal departments as part of a comprehensive radon abatement program.

6. Energy Independence and Security Act (EISA) of 2007 (Public Law 110-140). This Act seeks to move the United States toward greater energy independence and security; to increase the production of clean renewable fuels; to protect consumers; to increase the efficiency of products, buildings, and vehicles; to promote research on and deploy GHG capture and storage options; and to improve the energy performance of the Federal Government. The Act requires Federal agencies to: reduce petroleum consumption and increase alternative fuel consumption for Federal fleet vehicles; increase energy and water efficiency in Federal buildings; and promote high-performance green Federal buildings, the procurement of energy efficient products, and their inherent environmental benefits.

#### 6104. REQUIREMENTS

1. AQCRs. The regulations in reference (i) contain the published designations of AQCRs and the attainment, unclassifiable, and nonattainment designations for each state.

2. NAAQS. The regulations at reference (j) contain the primary and secondary NAAQS for each criteria pollutant. With respect to the NAAQS, EPA classifies all areas in the country as follows:

a. Unclassifiable. Any area that, on the basis of available information, cannot be classified as meeting or exceeding the NAAQS for a specific pollutant.

b. Attainment. Any area that meets the NAAQS for a specific pollutant.

c. Nonattainment. Any area that does not meet (or that contributes to ambient air quality in a nearby area which does not meet) the NAAQS for a specific pollutant.

(1) Maintenance Areas. A nonattainment area that achieves the NAAQS and becomes redesignated as an attainment area remains subject to maintenance plan requirements for a statutory defined period. These redesignated areas are referred to as maintenance areas. Maintenance areas are subject to the General Conformity requirements discussed below.

(2) Certain regulatory requirements are considered fundamental and apply to all areas, regardless of their attainment status, while other requirements apply only to nonattainment and maintenance areas, such as the General Conformity requirements. For help in determining attainment, nonattainment, and maintenance area designations, refer to reference (i) (see paragraph 6104.1); reference (k) online at <http://www.epa.gov/oar/oaqps/greenbk/>; or contact the state or local air pollution control office or the appropriate EPA Regional Office.

(3) States have the primary responsibility for implementing the CAA goals. Each state must develop a SIP that outlines the state's strategy for achieving and maintaining the NAAQS. EPA oversees this process.

3. SIPs. EPA-approved SIP rules for each state are published in reference (1).

4. NSPS. The extensive regulations for the NSPS program, over 1,000 pages, are contained in reference (m). The NSPS require covered new or modified stationary sources to install "the best system of emissions reduction" that EPA has determined has been adequately demonstrated. The NSPS apply to a wide variety of stationary source categories, regardless of location and any applicable PSD or nonattainment NSR requirements. The provisions of this regulation apply to the owner or operator of any stationary source that contains an affected facility, the construction, reconstruction, or modification of which is commenced after the date of publication in reference (m) of any standard (or, if earlier, the date of publication of any proposed standard) applicable to such facility. Examples of source categories with applicable NSPS requirements include, but are certainly not limited to, municipal waste combustors, fossil-fuel fired steam generators, incinerators, storage vessels for petroleum liquids, and volatile organic liquid storage vessels. Before constructing any new stationary source, modifying an existing stationary source, or operating any new or modified stationary source Marine Corps commands must determine, whether or not, the stationary source is subject to the NSPS.

5. NESHAPs. NESHAP regulations appear in reference (e) and (n). NESHAP regulations contained in reference (e), such as the asbestos NESHAP, are

those promulgated by EPA prior to reference (h) which amended reference (a). Reference (n) contains all of the NESHAPs promulgated to date for the numerous source categories established for the 190 HAPs initially listed under section 112 of reference (a) by reference (h).

a. Major Source. A major source of HAPs is any stationary source (or group of stationary sources) located within a contiguous area and under common control that emits or may emit, 10 tpy or more of any HAP or 25 tpy or more of any combination of HAPs.

b. Area Source. An area source of HAPs is any stationary source of HAPs that is not a major source. The term does not include motor vehicles or nonroad vehicles.

c. Source Categories. Major and area sources are grouped into categories and subcategories. Regulations establishing emission standards for the source categories and subcategories must be issued according to a phased-in schedule, with 25 percent of all categories and subcategories having standards by 1994, 50 percent by 1997, and 100 percent by 2000.

d. Emission Standards. EPA must establish technology-based emission standards that achieve the maximum degree possible of emissions reductions for new and existing sources in the appropriate category, while giving consideration to cost, nonair quality health and environmental impacts, and energy requirements. Measures to achieve the desired emissions standards include: implementing process changes; material substitutions; and measures to treat or control emissions, generally through the application of Maximum Achievable Control Technology (MACT). EPA also must review the MACT standards within 8 years of promulgation to determine if any residual risk to public health remains. If so, it must develop and issue health-based standards in addition to the MACT that provide an ample safety margin to protect public health.

6. PSD. As discussed above under Federal requirements, NSR or preconstruction review must be conducted for all new or modified major stationary sources. The requirements for the Federal PSD program in attainment areas are contained in the regulations promulgated at section 21 in reference (l). These Federal PSD program regulations apply wherever a state lacks an EPA-approved program, either in whole or in part. The PSD program regulations for attainment area SIPs are contained in the regulations promulgated at section 166 in reference (o). While state programs must meet the minimum requirements of the Federal program, states are free to enact a more restrictive PSD program. In a nutshell, the PSD program requires, before construction or modification of a major stationary source occurs, that the project proponent applies for authority to construct the source. A modification occurs when an existing major source makes a physical or operational change that results in a potential significant increase of any regulated pollutant. Note that regulated pollutant covers more pollutants than criteria pollutants and includes ODSs. The application for authority to construct must show that the new or modified source will comply with the NAAQS, the attainment area applicable PSD air quality increment, and will incorporate applicable BACT requirements. Before construction proceeds, ensure all necessary permits have been issued. Before constructing a

stationary source in a listed source category or any other stationary source that may be a major stationary source as defined under the regulations, Marine Corps commands must make a PSD applicability determination. At a minimum this requires determining the applicable regulations and whether the source is within a listed source category that will have a PTE equal to or greater than 100 tpy of a regulated pollutant or, if not listed, will have a PTE equal to or greater than 250 tpy of a regulated pollutant. EPA issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their state or local regulatory agency for approval to apply it as appropriate.

7. Visibility Protection. The regulations in reference (o), subpart P, contain the requirements for SIPs to protect visibility in Federal Class I areas. The regulations in subpart D of reference (i) identify Class I areas.

8. Nonattainment Area NSR. For nonattainment areas, the preconstruction review or NSR permit regulations for SIPs are promulgated at reference (o), sections 165(a) and (b). Before a new or modified major stationary source may be constructed in a nonattainment area, the project proponent must affirmatively show that there will be no net emissions increase in the area from the operation of the source and that progress will be made toward achievement of the NAAQS in the area (i.e., a net air quality benefit from the project). A modification is defined as any physical or operational change at an existing major source that results in a potential significant increase of a nonattainment pollutant. The preconstruction application must show that the source will be controlled by the applicable LAER technology and that the emissions from the source will, as a minimum, be offset by actual emission reductions (emission offsets) from existing sources within the same air quality area. The emissions offset must be certified by the EPA prior to permits being issued. Before constructing or operating new or modified major stationary sources in nonattainment areas, Marine Corps commands must make a nonattainment NSR applicability determination. At a minimum, this requires determining the applicable regulations and whether the source PTE equals or exceeds the applicable nonattainment area major source threshold. EPA has issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their state or local regulatory agency for approval to apply it as appropriate.

9. Nonattainment Areas. As discussed in paragraph 6103.1b(1), reference (a) has two similar, yet distinct, statutory schemes for criteria pollutant nonattainment areas. The basic, or general, provisions applicable to all criteria pollutant nonattainment areas appear in subpart 1 of part D in subchapter I of reference (a). The major source threshold in nonattainment areas designated under subpart 1 is 100 tpy of the nonattainment pollutant or precursor. The additional SIP provisions contained in subparts 2, 3, and 4 of part D of subchapter I, divide ozone, CO, and PM nonattainment areas into various classifications based upon the severity of the area's nonattainment. The major source threshold in these areas and the period of years the area has available to demonstrate attainment of the NAAQS varies depending upon

the severity of the nonattainment classification. The most severe degrees of nonattainment classifications have the lowest major source threshold and the longest period of years to demonstrate attainment. Reference (a) mandates that areas designated as nonattainment for any pollutant develop an implementation plan to achieve attainment of NAAQS for that pollutant within a defined period of years from the date of the nonattainment designation. New major sources or major modifications to existing major sources in nonattainment areas must obtain a Nonattainment NSR Permit before beginning any new construction or modification. The Nonattainment NSR Application must include LAER technology, applicable emission offsets, impact analysis, and other information relative to improving air quality. In addition, Reasonably Available Control Technology (RACT) emission controls are required for all existing major sources in nonattainment area SIPs. Additional Requirements for nonattainment areas are included below:

a. Ozone - 1-hour and 8-hour NAAQS. Most Volatile Organic Compounds (VOC) sources at Marine Corps installations, such as emissions from gasoline stations, printing, and ground equipment coating operations, are ozone precursors which in sunlight form ozone. These are regulated under the National Primary and Secondary Ambient Air Quality Standards according to the type of attainment area. VOCs from certain source categories may also be regulated, directly or indirectly, under one or more NESHAPs established by EPA under section 112 of reference (a). Note: VOCs are ozone precursors in the lower atmosphere, which can cause serious human health effects. These substances should not be confused with chemicals such as freon, which deplete the protective ozone layer in the upper atmosphere.

(1) Early Action Compact (EAC) Areas (8-hour NAAQS). On 15 April 2004, the EPA Administrator signed the final rule designating and classifying ozone nonattainment areas for the new 8-hour NAAQS. The final rule also contained the final approved designations of EACs. EACs are nonattainment areas under the 8-hour standard that have been determined to be eligible for a deferred designation. If these areas develop SIPs by 30 September 2005 that demonstrate they will attain the NAAQS by the end of 2007, and subsequently demonstrate attainment of the NAAQS, they will never be officially designated nonattainment. EPA plans to make final determinations regarding whether such areas have attained the NAAQS. In the interim, NSR and conformity (both transportation and general) requirements will not apply. However, if an EAC area misses any milestone under the compact with EPA, the area will immediately be designated as nonattainment and the applicable prescriptions of subchapter I, part D will apply. Such areas will be required to submit an attainment SIP within one year of the nonattainment designation.

(2) Basic Ozone Nonattainment Areas (8-hour NAAQS). On 15 April 2004, the EPA Administrator signed the final rule designating and classifying nonattainment areas for the 8-hour ozone NAAQS. The "Basic" ozone nonattainment area classification applies to those areas of the country that were designated under subpart 1 of part D under subchapter I. Subpart 1, discussed above, contains general, less prescriptive, requirements for nonattainment areas for any criteria pollutant, including ozone. Basic nonattainment areas are areas that had a design value (defined at section 900(d) in reference (o)), based on the most recent three years of monitoring

data, of less than 0.085 parts per million (ppm) ozone. However, the 8-hour ozone standards were successfully challenged in a lawsuit brought by numerous states and municipalities. The Court vacated and remanded the EPA 8-hour ozone rule, allowing nonattainment areas to submit a streamlined SIP under subpart 1 (of part D of Title I) of reference (a). EPA plans to propose a rule responding to the remand late in 2008 and hopes to finalize that rulemaking in mid-to-late 2009. The other nonattainment classifications, under subpart 2 of part D under subchapter I, for the 8-hour NAAQS are identical to the classifications applied to 1-hour Ozone nonattainment areas discussed below, except that no area of the country was designated as "Extreme" nonattainment for the 8-hour standard. As mentioned above, the minimum SIP control requirements for these areas are not expected to be promulgated until August 2004, but they will most likely mirror the requirements for areas similarly classified under the 1-hour standard.

(3) Marginal Nonattainment Areas (1-Hour NAAQS). In "marginal" nonattainment areas, a major source is defined as one that emits, or has the PTE, 100 tpy or more of VOCs or NO<sub>x</sub>. Standards have been published for sulfur oxides, PM, CO, ozone, NO<sub>x</sub>, and Pb. In nonattainment areas, these substances are regulated according to the type of attainment area and the volume emitted. Those areas classified as "marginal" nonattainment for OZONE must:

- (a) Apply NSR requirements to major VOC and NO<sub>x</sub> sources.
- (b) Complete an emissions inventory from all sources, to be updated every 3 years.
- (c) Apply RACT requirements which were in effect prior to the CAA enactment.
- (d) Devise a construction and operating permit program for new and modified sources.
- (e) Write an emissions statement for stationary sources of VOCs and NO<sub>x</sub>.
- (f) Devise an offset program, which requires that each new or modified major source of VOCs or NO<sub>x</sub> be offset by the ratio of 1.1 to 1.

(g) Marginal Nonattainment Areas (8-Hour NAAQS). The SIP requirements for these areas, which are projected to be promulgated in a final rule during August 2004, will very likely mirror those listed above. These areas must submit SIPs that demonstrate attainment within 3 years of the effective date of their designation and classification - 15 June, 2004. The NSR major source and general conformity thresholds for VOCs and NO<sub>x</sub> will be 100 tpy each, and a motor vehicle I/M program will not be required. However, an area may voluntarily implement an I/M program for additional credit (toward demonstrating attainment) in their SIP. The NSR offset ratio will be 1.1 to 1.

(4) Moderate Nonattainment Areas (1-hour NAAQS). In "moderate" nonattainment areas, a major source is defined as one that emits, or has the PTE, 100 tpy or more of VOCs or NO<sub>x</sub>. In addition to meeting the requirements

of "marginal" areas, "moderate" nonattainment areas must:

(a) By 1996, show reasonable further progress towards attainment through a 15 percent reduction in VOCs from the baseline.

(b) Apply RACT to all major stationary VOC and NO<sub>x</sub> sources.

(c) Require Stage II vapor recovery systems for all facilities that distribute more than 10,000 gallons of gasoline per month or, for independent, small business marketers, 50,000 gallons of gasoline per month. Requirements for the installation and operation of Stage II controls are effective in the state where the facility is located as follows: for new facilities (i.e., built after enactment) within 6 months after a rule requiring Stage II controls is adopted, for existing facilities with 100,000 gallons or greater capacity (average monthly sales for 2 years prior to rule adoption date) within 1 year after adoption, or for all other facilities within 2 years.

(d) Initiate a basic vehicle I/M program.

(e) Have an offset program which requires each new or modified major source of VOCs or NO<sub>x</sub> to be offset by the ratio of 1.15 to 1.

(5) Moderate Nonattainment Areas (8-hour NAAQS). "Moderate" areas must submit SIPs by 15 June 2007, and these areas must demonstrate attainment by 15 June 2010. Like marginal areas the NSR major source and general conformity thresholds will be 100 tpy each for NO<sub>x</sub> and VOCs. The SIP must include a Basic I/M program for motor vehicles, and the NSR offset ratio will be 1.15 to 1.

(6) Serious Nonattainment Areas (1-hour NAAQS). In "serious" nonattainment areas, a major source is defined as one that emits, or has the PTE, 50 tpy or more of VOCs or NO<sub>x</sub>. In addition to meeting the requirements of "moderate" nonattainment areas, "serious" nonattainment areas must:

(a) Operate an enhanced ambient monitoring program for NO<sub>x</sub>, ozone, and VOCs.

(b) Demonstrate through computer modeling that required provisions will lead to attainment.

(c) By 1996, show reasonable further progress towards attainment through a 15 percent reduction in VOCs from the baseline, plus an additional 3 percent per year averaged over each consecutive 3-year period until attainment.

(d) Institute an enhanced vehicle I/M program to be enforced through denial of vehicle registration.

(e) Establish a clean-fuel fleet program in those areas having a 1980 census population of 200,000 or more.

(f) Have an offset program which requires each new or modified major source of VOCs or NO<sub>x</sub> to be offset by the ratio of at least 1.2 to 1.

(7) Serious Nonattainment Areas (8-hour NAAQS). These areas must submit SIPs by 15 June 2007 and must ultimately demonstrate attainment of the 8-hour standard by 15 June 2013. Comprehensive VOC and NO<sub>x</sub> emissions inventories must be prepared by 2006 and must be updated every 3 years until the area attains the standard. The NSR major source and general conformity thresholds will be 50 tpy each for VOCs and NO<sub>x</sub>, and the NSR offset ratio will be 1.2 to 1. In addition, these areas must implement the Enhanced I/M program for motor vehicles.

(8) Severe Nonattainment Areas (1-hour NAAQS). In "severe" nonattainment areas, a major source is defined as one which emits, or has the PTE, 25 tpy or more of VOCs or NO<sub>x</sub>. In addition to meeting the requirements of "serious" nonattainment areas, "severe" nonattainment areas must:

(a) Identify and adopt enforceable transportation-control measures to offset growth in vehicle miles traveled and require employers of 100 or more workers to increase average vehicle occupancy by 25 percent.

(b) Have an offset program requiring that each new or modified major source of VOCs or NO<sub>x</sub> be offset by the ratio of at least 1.3 to 1.

(c) By December 31, 2000, submit to EPA a plan detailing enforcement provisions.

(9) Severe Nonattainment Areas (8-hour NAAQS). These areas must prepare and submit SIPs by 15 June 2007. Severe-15 areas must demonstrate attainment of the 8-hour standard by 15 June 2019; and Severe-17 areas must attain the 8-hour standard by 15 June 2021. The NSR major source and general conformity thresholds will be 25 tpy each for VOCs and NO<sub>x</sub>, and the NSR offset ratio will be 1.3 to 1. In addition, these areas must implement the Enhanced I/M program for motor vehicles.

(10) Extreme Nonattainment Areas. In "extreme" nonattainment areas, a major source is defined as one that emits, or has the PTE, 10 tpy or more of VOCs or NO<sub>x</sub>. In addition to meeting the requirements of "severe" nonattainment areas, states with "extreme" nonattainment areas must:

(a) Have an offset program that requires that each new or modified major source of VOCs or NO<sub>x</sub> be offset by the ratio of at least 1.5 to 1.

(b) Obtain an internal emissions offset of at least 1.3 to 1 for modifications of major stationary sources subject to NSR.

(c) Develop a plan that requires existing, new, or modified electric utility and industrial/commercial boilers emitting more than 25 tpy NO<sub>x</sub> to burn as their primary fuel natural gas, methanol, ethanol, or other clean fuel, or develop a plan to use advanced technology to control NO<sub>x</sub> emissions.

b. CO

(1) Moderate Nonattainment Areas. Areas designated as "moderate" nonattainment have a design value between 9.1 and 16.4 ppm. "Moderate" nonattainment areas must:

(a) Submit an accurate inventory of all emission sources and update the inventory every 3 years until attainment of the NAAQS is achieved.

(b) Annually provide and update a forecast of vehicle miles traveled, if the design value is 12.7 ppm or greater.

(c) Institute a vehicle I/M program applicable to CO with requirements equivalent to those for "marginal" OZONE nonattainment areas. For those areas with a design value greater than 12.7 ppm, the requirements applicable to CO are the same as the enhanced I/M program required of "serious" ozone nonattainment areas.

(d) Institute a clean-fuel fleet program like that required in "serious nonattainment for CO" or "serious nonattainment for ozone" nonattainment areas if the design value is 16 ppm or greater.

(e) Demonstrate attainment of the CO standard if the design value is greater than 12.7 ppm. Such a demonstration must incorporate specific annual emission reductions necessary to achieve attainment.

(f) Require those areas with a design value of 9.5 ppm or above to dispense oxygenated fuel during high CO portions of the year.

(2) Serious Nonattainment Areas. In those "serious" nonattainment areas where stationary sources are believed to contribute substantially to ambient CO levels, a major source of CO is one which has the PTE 50 tpy of CO. "Serious" nonattainment areas have a design value of 16.5 ppm and above. In addition to all the requirements of "moderate" CO nonattainment areas with a design value of 12.7 ppm or higher, "serious" CO nonattainment areas must:

(a) Require transportation control measures targeting CO like those which apply to "severe" ozone nonattainment areas, with the exception that CO is targeted.

(b) Implement an economic incentive program to encourage emissions reductions of 5 percent per year until attainment. In those "serious" nonattainment areas where stationary sources are believed to contribute substantially to ambient CO levels, a major source of CO is one which has the PTE 50 tpy of CO pollution.

(3) Multi-State CO Nonattainment Areas. A multi-state CO area exists if a CO nonattainment area is part of more than one state. In such an interstate situation, each of the affected states must coordinate the revision and implementation of the CO SIPs as they apply to the affected areas.

c. Particulate Matter 10 Microns (PM<sub>10</sub>) or Smaller. Areas designated as

nonattainment for PM<sub>10</sub> are classified initially as "moderate" nonattainment areas; areas failing to attain by the specified attainment date are reclassified as "serious." In addition, if EPA determines that any "moderate" nonattainment areas are unable to achieve the NAAQS practicably by the specified attainment date, those areas will be reclassified as "serious" nonattainment areas.

(1) Moderate Nonattainment Areas. Areas designated as "moderate" nonattainment must achieve attainment as quickly as possible, but no later than 6 years after classification. EPA may extend attainment dates if implementation requirements have been met and if performance standards have been achieved. "Moderate" nonattainment areas must:

(a) Devise a construction and operating permit program for new and modified stationary PM<sub>10</sub> sources.

(b) Use computer modeling to demonstrate that attainment by the attainment date can or cannot be achieved.

(c) Use Reasonably Available Control Measures, including RACT, by 10 December 1993, or within 4 years of classification as "moderate" nonattainment.

(2) Serious Nonattainment Areas. In "serious" nonattainment areas, a major source of PM<sub>10</sub> is defined as any stationary source (or group of stationary sources located in a contiguous area and under common control) that emits, or has the PTE, 70 tpy of PM<sub>10</sub>. All of the requirements that apply to "moderate" nonattainment areas also apply to serious nonattainment areas. In addition, "serious" nonattainment areas must:

(a) Use Best Available Control Measures (BACMs) within 4 years of classification as "serious" nonattainment.

(b) Demonstrate attainment (or demonstrate the impracticability of attainment for those areas seeking an extension) within 4 years of designation as "serious." Those areas designated as "serious" due to a failure to attain the NAAQS must demonstrate attainment within 18 months of such designation. Also, provide an outline of the BACM to be employed within 18 months.

(c) If a "serious" PM<sub>10</sub> nonattainment area fails to attain the NAAQS, it must submit a demonstration of attainment, which provides for an annual reduction of PM<sub>10</sub> emissions of at least 5 percent in the area, based upon the most recent emissions inventory. All attainment demonstrations must include quantitative milestones which demonstrate how reasonable further progress will be achieved. "Serious" PM<sub>10</sub> nonattainment areas must achieve milestones every 3 years until reaching attainment.

(d) EPA may waive any requirements for a "serious" PM<sub>10</sub> nonattainment area if it is determined that man-made sources do not contribute significantly to ambient PM<sub>10</sub> concentrations. Likewise, attainment dates may be waived if it is determined that non man-made sources contribute significantly to the violation of the NAAQS.

d. Particulate Matter 2.5 Microns (PM<sub>2.5</sub>) or Smaller. Under reference (a) section 109 (reference (q)) it is EPA's responsibility to establish both health- and welfare-based NAAQS for criteria pollutants - the primary and secondary standards, respectively. In addition, EPA is required to periodically review the efficacy of the NAAQS and promulgate new standards as required. Reference (r) was EPA's notice of promulgation of the final rule adding a new fine PM standard, the PM<sub>2.5</sub> NAAQS. That rulemaking, codified at reference (j), established the PM<sub>2.5</sub> primary and secondary NAAQS as well as the procedures for measuring and determining whether an area should be designated attainment or nonattainment. Such designations for PM<sub>2.5</sub> became effective in 2005. General Conformity requirements apply in PM<sub>2.5</sub> nonattainment and maintenance areas as of April 2006, one year after the effective date of the designations. In April 2007, EPA issued the final implementation rule that outlines the provisions states must include in their SIPs to attain the NAAQS.

#### 10. Conformity Rule

a. Prohibition. Section 176(c) of reference (a) prohibits any Federal agency from engaging in, supporting, providing financial assistance for; or licensing, permitting, or approving any activity that does not conform to an applicable SIP or Federal Implementation Plan (FIP). EPA outlines criteria and procedures for determining conformity. A Federal agency must determine whether a Federal action conforms to the SIP or FIP before implementing it. The General Conformity Rule applies only to Federal actions in areas designated as nonattainment or maintenance (defined in paragraph 6105.13). The nonattainment and maintenance area thresholds, excluding the new 8-hour ozone standard, are set out in tables 6-1 and 6-2.

b. SIP Revision. SIP conformity criteria and procedures may be more stringent than EPA rules if the state adopts conformity requirements that are equally applicable to all nongovernmental sources.

#### 11. Enforcement/Citizen Suit Provisions

a. Sovereign Immunity. The broad waiver of sovereign immunity in reference (a) subjects Federal facilities to all Federal, state, and local air pollution control requirements. These CAA requirements generally are enforced by the state or local air quality regulatory agency; however, EPA also has direct enforcement authority for Federal rules and has authority to enforce approved SIP rules.

b. State or Local Administrative Punitive Penalties. Marine Corps commands that are assessed punitive civil fines or penalties by state or local authorities for violations of air pollution control requirements must consult with command or regional environmental counsel before entering into settlement negotiations or paying any penalty. As of this writing, the U.S. 6<sup>th</sup> Circuit Court of Appeals has ruled that Federal facilities must pay state or local punitive penalties for past violations under reference (a). (See reference (s)). Therefore, DOD installations located in Kentucky, Michigan, Ohio, and Tennessee must pay such penalties. A California state court has also ruled that DOD entities must pay such penalties (See reference (t)); the DOJ agreed with the Service's recommendation not to appeal this case, but

views it as controlling only in that jurisdiction - Sacramento County. DOD policy in the 9<sup>th</sup> Circuit (Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington) is that installations may negotiate payment of state-levied penalties, but can pay them only upon the express approval of the DOJ. This was at least partly due to the DOJ's desire to preserve their position in regards to another case in the 11<sup>th</sup> Circuit (reference (u)) which was decided in favor of the government.

c. EPA Administrative Punitive Penalties. In 1997, the DOJ Office of Legal Counsel published an opinion that determined that EPA has authority under reference (a) to assess punitive civil monetary penalties against Federal facilities for violations of the Act. This authority includes penalties assessed by EPA inspectors under the Field Citation Program and administrative penalties under section 113 in reference (a). The EPA Consolidated Rules of Procedure (CROP) for administrative penalty proceedings are published in reference (v). Marine Corps activities that receive Administrative Complaints from their EPA Regional office under section 113 in reference (a) and the CROP, must immediately notify their command and regional counsel and their chain of command. Failure to properly submit a detailed answer to an Administrative Complaint to the Regional Hearing Clerk within 30 days of receipt of the complaint will be deemed an admission to all allegations contained in the complaint. The maximum penalty per violation under the Field Citation program, as adjusted for inflation in 1996 (reference (x)) and again in 2002 (reference (x)), is \$6,200. The procedures for issuance of field citations and for contesting them are published in reference (y). The maximum penalty, adjusted for inflation that EPA may assess under reference (v) is \$32,500 per day per violation up to a maximum total penalty of \$270,000; however, the \$270,000 maximum total penalty per proceeding may be increased by EPA if the U.S. Attorney General concurs.

d. Administrative Fees. Marine Corps commands must pay administrative fees and assessments imposed by Federal, state, or local authorities when imposed to defray the costs of the air pollution regulatory program, when the fees are imposed generally on all similarly situated regulated entities in the same manner and extent (i.e., nondiscriminatory against Marine Corps facilities), and when the fees are not dependent upon the detection or processing of alleged violations.

e. Citizen Suits. The regulations for the prerequisite notice for CAA citizen suits are published in reference (z). Civil actions may be brought against any individual or governmental body (including the United States) for present or repeated CAA violations in the Federal District Court in the district where the source alleged to be in violation of reference (a) is located.

12. Title V Operating Permits. EPA regulations at reference (aa) establish minimum requirements for state programs. EPA regulations at reference (ab) establish the Title V Operating Permit requirements that apply in any state that has not obtained full approval from EPA for its part 70 program by the applicable deadline, or in any state that has lost approval for its program under reference (a), section 502(i)(4). Additional guidance for development of state programs and source compliance with the regulatory requirements was issued in three EPA White Papers -- references (ac), (ad), and (ae). EPA has

also issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their state or local regulatory agency for approval to apply it as appropriate. Title V of reference (a) requires that each state develop, implement, and enforce an operating permit program. However, EPA retains significant authority to oversee state permit program implementation. The EPA must review and approve state permit programs, review proposed permits, veto improper permits, and, if a state fails to adopt or implement an approved program, develop and implement a Federal permit program. The permit program attempts to clarify, in a single document, all the requirements applicable to a source, including requirements from the SIP, the acid rain program, and the air toxics program. The permit program also requires that permit fees be used to finance state air programs. After the effective date of any permit program approved under Title V, the law prohibits operating without a permit or operating in violation of any requirement of such a permit. The program applies to all existing and new major stationary sources of air pollution, including those operated on Federal facilities, which are subject to regulation under reference (a). The term "Major Source" is defined in paragraph 6104.5a for air toxics and paragraphs 6104.7-10 for criteria pollutants. Once a source is subject to a Title V permitting program, its emissions of all regulated air pollutants (except those which meet the permitting authority's criteria for "insignificant" emissions) must be described in the permit application along with all emissions of pollutants for which the source is considered major. Similarly, applications must describe all emissions units that emit regulated air pollutants, except for those emission units deemed insignificant. Regulated air pollutants include, but are not limited to, all criteria pollutants and precursors; any pollutant subject to a NSPS; any pollutant subject to reference (e) or a case-by-case MACT determination; and Class I or II ODSs.

a. Permit Application. Applications for operating permits must be "timely" and "complete." An application is "timely" and "complete" if submitted according to the approved state program.

b. Certification. A responsible official (typically the installation commander) must sign the Title V Operating permit application certifying its truth, accuracy, and completeness. The certification must include the facility compliance status and the method used to determine this status. In addition, under reference (a) section 503(b)(2), the responsible official must also certify the facility's compliance or noncompliance regarding all the permit's requirements for the previous 12 months, at least once a year. The Title V Compliance Certification must be filed with the state or local permitting agency, as well as the EPA regional office. These certifications necessarily require a thorough periodic and systematic review of a facility's compliance status throughout the reporting year, due to the potential for individual liability for false reporting by the responsible official in any certification, as well as possible regulatory or citizen-suit enforcement against the facility for any reported noncompliance. The annual compliance certification must be true, accurate and complete, based on information and belief formed after a reasonable inquiry.

13. State and Local Permit and Regulatory Programs. State or local air quality regulations typically require that all new or modified stationary sources of emissions obtain a permit, unless the source category is expressly exempted in the regulations. Typical state or local regulations list a handful of insignificant stationary source categories that are exempt from permitting requirements, such as small portable emergency backup generators. However, insignificant sources expressly exempt from preconstruction and operating permit requirements may be subject to periodic recordkeeping, reporting, and other requirements or limitations, such as operating records detailing hours of operation, fuel usage, or the type or grade of fuel used. For all nonexempt source categories usually a preconstruction application or an operating permit application, or both, are required before any new stationary source of emissions may be constructed or operated. These regulations also typically require an application before reconstruction or modification occurs to any existing source, and the operator usually must obtain a new operating permit, or an amendment to an existing operating permit before operating the source after reconstruction or modification. Permits will usually include permit conditions under which a particular emission unit or group of emission units will be required to operate. The permit conditions will often be taken directly from Federal and state regulations, although they may also be based on the specific air pollutant emitting situation at the facility. State and local regulatory agencies typically have enacted general air quality rules that are designed to control or abate pollution that may, or may not, be included in permit conditions. These general rules address visible emissions (or opacity), odor, nuisance, and equipment breakdown provisions. The requirements from these rules are sometimes called facility-wide applicable requirements.

14. Provisions for Mobile Sources. For the most part mobile source programs do not have a direct impact Marine Corps installations or activities. With the exception of California (and states that adopt regulations identical to California's), mobile source emission controls are predominantly implemented through nationwide programs promulgated by EPA. The typical regulations under subchapter II of reference (a) target manufacturers of new motor vehicles and engines, nonroad vehicles and engines, and/or the fuels they operate on. These regulations typically contain an automatic national security exemption (NSE) for manufacturers to apply to engines for DOD weapon systems and armored vehicles. The regulations also typically contain provisions for case-by-case NSEs for engines that do not meet the criteria for an automatic exemption. Examples of potential application of the automatic NSE by a manufacturer would include the Light Armored Vehicles and the M1-A1 Abrams Tank. An example of a possible application of a case-by-case NSE would be the outboard engines for Zodiac boats used by reconnaissance or Special Forces. A few mobile source programs, however, do expressly target the activities of Federal agencies, including the military, such as the centrally-fueled fleet program and fleet vehicle requirements under references (af) and (ag). These programs, among other things, are briefly discussed below.

a. Aircraft. Reference (a) authorizes EPA, in consultation with the Secretary of Transportation, to develop emission standards applicable to any air pollutant emission from any class or classes of aircraft engines. No state or local air quality region may adopt or attempt to enforce any

standard respecting any air pollutant emission from any aircraft or engine unless such standard is identical to one developed by EPA and the Secretary of Transportation. While limited regulation of emissions from aircraft engines is possible, such regulation applies only to uninstalled aircraft engines. The regulations for control of air pollution from aircraft and aircraft engines are contained in reference (ah).

b. Nonroad Engines. EPA conducted and published a study of nonroad engine and vehicle emissions in November 1991. On the basis of this study, EPA initiated actions to establish national standards for certain categories of nonroad engines.

c. Vehicle I/M. Certain nonattainment areas require vehicle emissions testing. Section 118(c) in reference (a) requires Federal Government fleet vehicles to comply with the provisions of an approved I/M program in ozone or CO nonattainment areas designated under subparts 2 or 3 of part D of subchapter I of reference (a). Military tactical vehicles are exempt from the I/M program requirements in those areas. Section 118(d) requires that Federal agencies ensure that their employees operating their motor vehicles on Federal facilities comply with the I/M requirements in those same areas designated as nonattainment for ozone and CO. To implement those requirements, EPA promulgated requirements for states to include in their SIPs for those areas at reference (o), subpart S. However, in a July 29, 1998 letter, the DOJ, Environment and Natural Resources Division, advised EPA that the portion of its regulations relating to state I/M requirements for Federal agency fleet and certain Federal employee vehicles under reference (a) sections 118(c) and (d), respectively, were invalid. In short, SIP rules (under reference (o), subpart S) that target only Federal fleet vehicles or Federal employee vehicles for particular I/M related requirements based upon EPA's rule are probably invalid. On the other hand, SIP rules that apply to all fleet vehicle owners/operators in the state or employee vehicles of all employers within the state are probably valid requirements for which Federal sovereign immunity has been waived under section 118(a) of reference (a). EPA is in the process of promulgating a rule to implement reference (a) section 118(c) and (d) requirements for Federal fleet and employee vehicles. EPA has published draft guidance, reference (ai). However, until EPA promulgates a final rule, facilities will either need to comply with nondiscriminatory I/M programs (e.g., Washington state's fleet vehicle program), or maintain the status quo (e.g., fleet and employee vehicle I/M requirements in California), or seek guidance from CMC (LF) or the advice of counsel whether any particular fleet or employee vehicle I/M requirements legally apply in the absence of the EPA rule. For installations currently complying with pre-existing state I/M requirements, including both fleet and employee vehicle programs, the DOD position is to maintain the status quo until EPA revokes existing invalid SIP provisions under its own existing rule by promulgating a new Federal rule and implementation program.

d. Fuels

(1) Leaded Gasoline. All facilities in the United States that dispense fuel for vehicles with catalytic converters will be equipped to dispense unleaded gasoline to such vehicles. It is illegal to knowingly dispense leaded gasoline into vehicles with catalytic converters or into any

vehicle labeled for unleaded gasoline. As of 1995, the production or sale of leaded gasoline or lead additives is prohibited.

(2) Oxygenated Gasoline. States that include all or part of an area designated nonattainment for CO and having a design value (defined in paragraph 6105) of 9.5 ppm or higher must include in their SIP a provision for selling and dispensing oxygenated gasoline in metropolitan areas within the nonattainment area. EPA requires that this provision be in effect during high CO portions of the year (winter). EPA may waive the requirement for oxygenated fuel if a state can demonstrate satisfactorily that imposing such a provision interferes with the attainment of any other NAAQS.

(3) Reformulated Gasoline. Beginning in 1995, the nine worst ozone nonattainment areas with a 1980 population greater than 250,000 must implement the use of reformulated gasoline. Other nonattainment areas may petition to opt-in to the reformulated gasoline program; however, if domestic supplies are inadequate, EPA may delay extending the program into these areas by up to 3 years.

(4) Volatility. To reduce the substantial release of VOCs into the atmosphere, Federal guidelines limit the volatility of gasoline marketed during the high ozone season (summer) in the CONUS.

(5) Diesel Fuel Sulfur Content. Beginning with model year 2007, the sulfur content of highway diesel fuel cannot have a sulfur content higher than 15 ppm (reference (aj)). This requirement applies to the fuel used in Marine Corps fleet vehicles and privately owned vehicles. However, the regulation provides an exemption for the use of higher sulfur JP-5 and JP-8 in tactical vehicles used on highways if their engines have either the automatic NSE or case-by-case NSE discussed above. Proposed rulemaking would also lower the sulfur content dramatically in heavy duty nonroad diesel engines and vehicles. It is anticipated that the use of JP-5 and JP-8 in tactical ground support equipment will similarly be exempted from the low (and ultra-low) sulfur diesel fuel requirements.

e. Clean Fuel Fleet Vehicles. According to reference (a), the clean fuel requirements impact the following owners/operators of centrally-fueled fleets of 10 vehicles or more: those located in "serious," "severe," or "extreme" ozone nonattainment areas, and those located in "serious" CO nonattainment areas. Beginning with model year 1998, 30 percent of new light-duty fleet vehicle acquisitions must be clean-fuel vehicles; in model year 1999, that percentage increases to 50 percent; after the year 2000, it increases to 70 percent. Reference (a) mandates that any Federal facility that dispenses clean alternative fuels to Federal fleet vehicles must offer such fuel for public sale during reasonable business hours, subject to national security concerns and the commercial availability of such fuels in the vicinity of the facility.

f. AFVs. References (af), (ag), and (ak) include certain requirements for Federal fleet vehicles and purchasing/leasing AFVs. These requirements do not apply to police and emergency vehicles or vehicles used for military purposes that have been certified by the Secretary of Defense (SECDEF) as exempt. The CMC (LFS) implements the Fleet vehicle and AFV requirements of

references (af), (ag), and (ak) in accordance with Department of Energy (DOE) guidance.

#### 15. Miscellaneous Provisions

a. Jet Engine Test Cells. Under reference (a), EPA is evaluating emissions from aircraft engine test cells. NO<sub>x</sub> emissions from test cells will be studied jointly by the DOD, the Department of Transportation (DOT), and EPA. Following the completed study, states may choose to adopt or enforce any standard for NO<sub>x</sub> emissions from aircraft engine test cells only after issuing a public notice stating whether such standards are in accordance with the findings of the study. The regulations for control of air pollution from aircraft and aircraft engines are contained in reference (ah).

b. FIPs. Section 110(c) of reference (a) requires EPA to issue a FIP when a state has failed to make a required SIP submission, when the SIP submission does not satisfy the minimum criteria, or when a SIP submission has been disapproved in whole or in part and the state has not corrected the deficiency in a timely manner. Typically, a SIP is disapproved because it does not contain sufficiently strict requirements to demonstrate attainment. A FIP generally will contain requirements that apply to more types of sources and that control emissions more stringently than did the SIP.

c. Emission Reduction Credits (ERCs). Sections 110(a)(2)(A) and 172(c)(6) of reference (a) authorize states, or their local Air Quality Districts (AQDs), to establish a trading system for ERCs. ERCs are created when pollution emitting equipment is removed from service or when emissions from in-service equipment are reduced, when the emission reductions are not otherwise required by reference (a) or a current SIP, and when the owner applies under the AQD regulations for reduction credit. Each ERC constitutes permission from the AQD to emit a stated amount of a specific air pollutant. Following validation by the AQD, ERCs may be transferred by sale, lease, or other disposal method for use by other emission sources within the same AQD. Marine Corps installations should obtain stationary and/or mobile source ERCs from any permanent, quantifiable, excess emission reductions in areas with emissions banking and trading programs. Marine Corps installations and activities shall not dispose of ERCs, or forego the creation of ERCs, without first coordinating the proposed disposition with CMC (LF) and the Marine Corps/DOD REC.

d. Federal Contractor Restrictions. No Federal agency may enter into a contract with any person who is convicted of a criminal offense under reference (a). This restriction applies to the procurement of goods, materials, and services to perform such contract at any facility which gave rise to the conviction if such facility is owned, leased, or supervised by such person.

e. Acid Rain. In order to reduce the detrimental environmental effects of acid deposition, Title IV of reference (a) mandates large-scale reductions in the emissions of SO<sub>2</sub> and NO<sub>x</sub> through an innovative market-based approach aimed at electric utility plants. By the year 2000, the goal of Title IV was to reduce SO<sub>2</sub> emissions by 10 million tons below 1980 emission levels and to reduce NO<sub>x</sub> emissions by 2 million tons from 1980 levels.

f. Aerospace and Marine Coatings. Reference (a) requires EPA to issue NESHAPs and Control Techniques Guidelines (CTGs) to control emissions from aerospace manufacturing/rework and shipbuilding/repair. The rules establish MACT and BACT requirements for aircraft and ship activities such as cleaning, painting, repainting, maskant application, and waste handling. Generally, the emission reductions are achieved through the use of compliant materials or control devices. Other requirements include testing, recordkeeping, and reporting protocols. These rules have substantial cost and labor impacts. References (e) and (n) address a specific source category under reference (al), similar to the NESHAPs for gasoline terminals or halogenated solvent cleaning.

g. Training. Workers who prepare or supervise the preparation of air emissions inventories, air emissions permit requests, and air emissions reports will receive environmental overview training as specified in chapter 5 of this Manual. They will receive specific comprehensive training in their assigned subject matter and must be familiar with the provisions outlined in chapter 5 of this Manual. In addition, reference (a) requires the following:

(1) Chemical Process Safety Management. Reference (a) requires the issuance of a chemical process safety standard to protect employees from the workplace dangers associated with accidental releases of highly hazardous chemicals. Employers must train workers in operating procedures, emphasize hazards and safe practices, ensure that contractors and contracted employees have appropriate information and training, and train and educate employees and contractors in emergency response as comprehensively and effectively required by reference (am). The standard and a list of highly hazardous chemicals can be found in section 119 of reference (an).

(2) Solid Waste Incineration. Reference (a) requires a program for the training and certification of operators of high capacity (greater than 250 tons per day) solid waste incineration units and high-capacity fossil fuel-fired plants. As of November 15, 1994, to legally operate any such unit, each person with control over processes affecting emissions from such units must satisfactorily complete a training program meeting EPA requirements.

h. Prescribed Burning/Vegetation Management. EPA does not directly regulate prescribed burning. However, EPA encourages states to develop Smoke Management Plans to mitigate impacts to public health and welfare from such activities. For more detail, see EPA draft policy guidance for prescribed burning activities in 1998, reference (ao) and refer to any applicable state or local requirements.

16. Radon. The Navy Radon Assessment and Mitigation Program (NAVRAMP) was submitted and approved by EPA as the plan to identify, mitigate, and prevent radon contamination in Navy/Marine Corps-occupied buildings. All Marine Corps installations were invited to participate in the NAVRAMP testing program to identify the level of indoor radon. Buildings determined to have indoor radon levels above 4 picoCuries per liter (pCi/L) will be mitigated to reduce levels. Appropriate radon reduction techniques will be incorporated into the design and construction phases of new structures where it has been

determined necessary because of regulatory requirements, historical data, or geological conditions.

17. ODSs. Regulations promulgated in reference (ap) are enacted to implement reference (aq) and sections 608 and 609 of reference (a). These regulations, which in general ban the use of certain nonessential Class I and II substances and establish a myriad of requirements to promote responsible use, reuse, and recycling of essential substances, apply to all Marine Corps installations. Installations with large refrigeration and air conditioning units (i.e., equipment containing more than 50 pounds of refrigerant) or those installations using ODSs in metal parts degreasing operations will have more requirements than activities with smaller ODS consumption. For further detail on the ODS program, see reference (c). Appliances subject to regulation are those that use ODSs as a refrigerant and which are used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer. The regulations in reference (ap) establish requirements regarding the service, maintenance, repair, and/or disposal of a wide array of equipment containing ODSs for refrigeration purposes. The regulations establish record keeping requirements, technician certification requirements, leak detection and repair requirements, periodic leak rate determination and replacement requirements, and requirements pertaining to the disposal of small and large appliances common to most of our installations. Besides building air conditioning and food service refrigeration units, other ODS-containing sources commonly used at Marine Corps installations include refrigerated drinking fountains, ice machines, soft drink vending machines, antifreeze recycling units, halon-charged fire suppression systems, and vehicle air conditioning recycling units.

18. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

#### 6105. TERMS AND DEFINITIONS

1. Acid Rain. The acidic deposition caused by the atmospheric chemical transformation of SO<sub>2</sub> and NO<sub>x</sub> emissions.

2. Air Pollution Emergency Episodes. The accumulation of air pollutants in an area that reaches levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of individuals.

3. Alternative Fuels. Substitutes for traditional petroleum products such as gasoline and diesel fuel. Reference (af) defines alternative fuels to mean methanol, denatured ethanol, and other alcohol; mixtures containing up to 85 percent (but not less than 70 percent) alcohol with the balance consisting of gasoline or other such fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived fuels; fuels derived from biological materials; electricity; and other substantially nonpetroleum-based fuels.

4. BACM. Emission control measures that achieve the greatest possible reduction in the emission of particulate matter.

5. BACT. Emission control technology to be applied to new sources which are located in areas that are in attainment of the NAAQS and that trigger NSR for the pollutants emitted from the new sources. States are to apply BACT on a case-by-case basis, taking into account economic considerations. BACT must be at least as stringent as the NSPS for similar facilities.

6. Clean Fuels. Any fuel such as alcohol or fuel blends containing 85 percent alcohol with gasoline or diesel; natural gas; liquefied petroleum gas; hydrogen; reformulated gasoline and diesel fuel; hydrogen; or any power source, including electricity, that meets the clean-fuel requirements and emission standards of reference (a).

7. Conformity. A conformity determination is a certification by the installation that it will comply with all requirements of the SIP. A determination is required only if: emissions levels exceed de minimis levels, defined in section 853(b)(1) or (2) of reference (o), or the Federal action is regionally significant, and the installation is located in a nonattainment or maintenance area.

8. CTG. Documents published by EPA designed to assist the states/localities in selecting the most appropriate technologies to apply for the control of major sources of air pollution.

9. Criteria Pollutant. A pollutant that the EPA Administrator has determined will cause or contribute to air pollution, that may reasonably be anticipated to endanger public health and welfare and for which air quality criteria have been established. Criteria pollutants include: SO<sub>2</sub>, NO<sub>2</sub>, ozone, CO, Pb, and PM.

10. Design Value. The value (or range), usually measured in ppm, used for nonattainment classification of criteria pollutants; it reflects the severity of the nonattainment area.

11. FIP. A Federally-imposed air quality plan which supersedes a SIP due to a state's failure to develop an adequate plan to achieve and maintain the NAAQS.

12. LAER. That rate of emissions that reflects the most stringent emission limitation contained in the implementation plan of any state for such class or category of source, or the most stringent emission limitation achieved in practice by such class or category of source, whichever is more stringent. The application of an LAER will not permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under the applicable NSPS.

13. Maintenance Area. Any geographic region of the United States previously designated nonattainment pursuant to reference (h) and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of reference (a).

14. Major Modification. Any physical or operational method change of a major stationary source that would result in a significant net emissions increase of any pollutant regulated by reference (a).

15. Major Source. Any source capable of emitting more than a threshold amount of a particular pollutant per year. The threshold amounts vary according to the attainment classification of the area in which the source is located and the pollutant (or pollutants). EPA has issued guidance on major source issues (reference (p)).
16. MACT. Emissions control technology which achieves the maximum emission reduction possible. MACT is applicable only to major sources of pollutants listed as HAPs under section 112 of reference (a).
17. Motor Vehicle. Any self-propelled vehicle designed for transporting persons or property on a street or highway.
18. NAAQS. Air quality standards that EPA has established for six criteria pollutants in order to provide an adequate margin of safety in protecting the general health and welfare of the public.
19. NSPS. See Standards of Performance for New Stationary Sources (paragraph 6105.33).
20. NSR. State program for reviewing major sources and modifications prior to construction in both nonattainment and PSD program areas.
21. Nonattainment Area. An area which fails to meet the NAAQS for one or more of the criteria pollutants.
22. Nonroad Engine. An internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards for stationary internal combustion engines, or emission standards for new motor vehicles or new motor vehicle engines.
23. Nonroad Vehicle. A vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition.
24. Offsets. Emission reductions obtained from one source in order to compensate for increased emissions from another.
25. Oxygenated Gasoline. Gasoline that is blended with any one of a number of additives in order to increase the oxygen content, resulting in more complete combustion and reduced emissions.
26. Ozone. The major constituent of "smog," ozone, is formed when VOCs and NO<sub>x</sub> react in sunlight. The atmosphere has two distinct layers of ozone. For air quality purposes, interest rests in the formation and transport of ground level ozone. At ground level, ozone has been shown to adversely affect the respiratory system and has proven to be the primary criteria pollutant which has caused regions to be declared in nonattainment of the NAAQS. At altitudes above 7 miles, stratospheric ozone plays a vital role in blocking out dangerous ultraviolet radiation. Recent evidence of a decline in ozone levels has resulted in a worldwide call for the banning of ODSs.

27. ODSs. Any chemical that is listed as a Class I or Class II substance in section 602 of reference (a).
28. PM. A criteria air pollutant that includes dust, soot, and other small materials that are released into, and are transported by, the air.  $PM_{10}$  is that portion of the total suspended PM with an aerodynamic diameter of 10 microns or less.  $PM_{2.5}$  is that portion of PM with an aerodynamic diameter of 2.5 microns or less.
29. PSD Program. Emission control program under NSR which applies to attainment areas.
30. Radon. A heavy, colorless, odorless, radioactive gas formed by the decay of radium. Radon can be found in soils, rocks, and some groundwater supplies, and can seep into buildings.
31. RACT. Emissions control technology that achieves the lowest possible emissions level given technological and economic considerations. RACT is applied to existing stationary sources in nonattainment areas and often involves the installation of new control equipment on older sources.
32. Reformulated Gasoline. Gasoline that has undergone special processing in order to meet performance requirements for  $NO_x$  emissions, oxygen content, benzene, heavy metals, and volatility.
33. Standards of Performance for New Stationary Sources or NSPS. National emission standards that limit the amount of pollution allowed from new or modified sources.
34. SIP. A plan developed by each state to implement and enforce regulations in order to achieve and maintain the NAAQS within that state.
35. Stationary Source. Generally, any source of an air pollutant except those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section 216 of reference (a).
36. Title V Operating Permit. A Federally-enforceable document issued by the states to major sources, sources subject to NSPS, sources subject to any standard under section 112(d) of reference (a), and sources subject to NSR. This document defines emission standards, operational procedures, and all obligations of the source under reference (a).
37. VOCs. A VOC is a photochemically reactive organic compound which evaporates readily under normal temperature and pressure conditions. As a result of the tendency to evaporate readily, VOCs are primary contributors to the formation of ground level ozone.

CHAPTER 6

AIR QUALITY MANAGEMENT

SECTION 2: MARINE CORPS POLICY

6200. STATIONARY SOURCES

1. It is Marine Corps policy to comply with all Federal, state, and local emission control standards and all other provisions of reference (a) and with specific air emission permit conditions for all stationary sources. Stationary sources are categorized as either major or minor based on their PTE regulated air pollutants. The determinations of "major" sources on military installations may be essentially the same as for non-military industrial and commercial facilities; however, some facilities may currently be inequitably characterized as a single stationary source of emissions fence-line to fence-line. EPA issued guidance to help ensure equitable treatment for the regulation of military stationary sources, reference (p). States are not required to apply the EPA guidance, but installations should consider the potential benefits of applying it to their facility operations and coordinate with their state or local regulatory agency for approval to apply it as appropriate.

2. Fuel Standards. Marine Corps commands must comply with Marine Corps and regulatory fuel composition requirements applicable to solid, liquid, and gaseous fuels for stationary fuel-burning equipment.

6201. MOBILE SOURCES

1. The Marine Corps must comply with all Federal, state, and local emission control standards relevant to mobile sources.

2. Tampering with Emission Controls. Marine Corps personnel must not permanently remove or render inoperative any device or element of design in a government motor vehicle or engine which is installed to comply with air quality regulations.

3. Fuel Standards. Marine Corps commands must comply with Marine Corps and regulatory requirements for the composition of fuels used in motor vehicles. Marine Corps installations dispensing gasoline must be equipped to dispense unleaded gasoline. The Marine Corps may not procure any gasoline-powered vehicle that cannot operate on unleaded gasoline.

4. Vehicle I/M. Marine Corps commands must comply with local area vehicle emission I/M program requirements for fleet vehicles and must furnish proof of compliance when required by the local regulatory authority. Commands are authorized to develop I/M procedures for their fleet vehicles as a part of normal preventive maintenance programs.

5. AFVs. Per reference (af), the Marine Corps must incorporate light-duty (medium/heavy duty trucks and buses are optional) AFVs into its Garrison Mobile Equipment (GME) vehicle fleet. In order to meet CAA requirements, the

Marine Corps began acquiring AFVs (by both lease and new vehicle acquisitions) in 1993 and has been targeting the placement of these vehicles at those activities located within nonattainment and metropolitan statistical areas (areas with a population of 250,000 or more).

a. The CMC (LF) prescribes minimum AFV requirements for the quantity and type of vehicles to be used at Marine Corps activities that meet fleet criteria under reference (af). Marine Corps installations may meet these requirements by requesting AFV replacements for Marine Corps-owned vehicles and by leasing vehicles. Leased AFVs may be acquired through General Service Administration Interagency Fleet Management System under the Headquarters, Marine Corps-funded GME vehicle leasing program and/or by using local O&M, MC funds. Marine Corps activities that are not subject to reference (af) fleet criteria are encouraged to participate in the AFV program.

b. The Marine Corps prefers original equipment manufacturer AFVs to AFV conversions. However, when converting vehicles, every effort should be made to meet - at a minimum - certification requirements of the state in which the vehicles are located, such as those of the California Air Resources Board.

6202. AIR POLLUTION EMERGENCY EPISODES. Where required, Marine Corps facilities must have an air pollution emergency episode contingency plan identifying all actions that can reasonably be taken without compromising essential services and mission responsibilities.

6203. SIPs. Marine Corps installations must identify and take reasonable steps to quantify emissions growth planning requirements and coordinate them with the REC and regulatory agencies during SIP revision planning activities.

6204. CONFORMITY. Marine Corps commands located in nonattainment or maintenance areas must comply with the requirements of the CAA General Conformity Rule. Conformity determinations typically will be conducted at the same time NEPA analysis and documentation procedures are done for the planned action (see NEPA procedures in chapter 12 of this Manual).

6205. ERCs. Installations shall acquire and dispose of ERCs as if they were government personal property.

1. Bases being closed or realigned under the process outlined in references (ar) and (as), or any subsequent base closure law, must consider the use of ERCs and dispose of them per DOD and DON policy.

2. Operating installations must use and dispose of ERCs in the following manner:

a. ERCs generated from a change in operations, removal from service of equipment, or any other action that results in emissions reduction may be banked, in the following order of priority, for:

(1) Future use by that same installation.

(2) Transfer to another Marine Corps installation within the same AQD or another AQD that will accept transfer of the credits.

(3) Transfer to any DOD installation within the same AQD or another AQD that will accept the transfer of credits.

(4) Transfer to any other Federal agency within the same AQD or another AQD that will accept the transfer of credits.

b. Installations must employ the EMH and assess P2 opportunities in considering the use of ERCs.

c. ERCs may be transferred between services under reference (at), with or without compensation.

d. Installations must report ERCs determined to be Federal Government surplus for screening and disposal using the existing personal property disposal mechanisms. Installations requiring ERCs must either:

(1) Purchase ERCs from other sources.

(2) Obtain offsets from on-installation sources.

(3) Purchase ERCs when and if requirements necessitate their purchase after coordination with the CMC (LF). No ERCs may be disposed of, creation forgone, or traded to non-Marine Corps facilities, unless such action has been coordinated with the CMC (LF) and the appropriate USMC/DOD REC. In addition, Marine Corps installations shall take reasonable steps to quantify ERCs from creditable reductions under their control and obtain legal title to them under applicable regulations.

6206. AIRBORNE RADIONUCLIDE EMISSIONS. Marine Corps installations must comply with reference (au) regarding airborne radionuclide emissions into the environment. Within the Navy and Marine Corps, the Naval Nuclear Propulsion Program is responsible for all aspects of compliance with requirements pertaining to nuclear propulsion.

6207. RADON. EPA has approved the NAVRAMP as the plan to identify, mitigate, and prevent radon contamination in Marine Corps-occupied buildings. All Marine Corps installations must implement the NAVRAMP testing program to identify levels of indoor radon. Radon testing and results should be coordinated with the cognizant Navy Engineering Field Division/Activity (EFD/EFA). In buildings with indoor radon levels above 4 pCi/L, the Marine Corps must reduce radon to acceptable levels. Appropriate radon-reduction techniques must be incorporated into the design and construction phases of new structures where it has been determined necessary due to regulatory requirements, historic data, or geological conditions.

6208. ASBESTOS NESHAP. Although EPA promulgated the NESHAP for asbestos in 1973 (reference (av), codified at reference (e)), it remains the subject of frequent civil and criminal enforcement under reference (a). Subpart M of reference (n) applies to the demolition, removal, and disposal of regulated asbestos containing material (RACM). Subpart m of reference (e) protects the public by minimizing the release of asbestos fibers during activities involving the processing, handling, and disposal of asbestos-containing material. Accordingly, subpart M of reference (e) specifies work practices

to be followed during demolitions and renovations of all structures, installations, and buildings. In addition, the regulations require the owner of the building and/or the contractor to notify applicable state and local agencies and/or EPA Regional Offices before all demolitions, or before renovations of buildings that contain a certain threshold amount of asbestos. The RACM removed must be wetted and kept wet, properly containerized and marked, and is subject to land disposal restrictions (LDRs). Before undertaking demolition or renovations, Marine Corps installations and activities must determine whether subpart M of reference (e) applies and follow all applicable Federal, state, or local requirements. Note that some state requirements are more stringent than the Federal regulations (e.g., Asbestos is a HW in California and certain other states, but only a solid waste under Federal regulations).

CHAPTER 6

AIR QUALITY MANAGEMENT

SECTION 3: RESPONSIBILITIES

6300. CMC (LF)/COMMANDER MCICOM

1. Coordinate the overall implementation of CAA requirements. Ensure that all Marine Corps activities comply with current Federal, state, and local air pollution control requirements.
2. Coordinate the review of proposed and final CAA regulations.
3. Coordinate the review of fines/penalties with the CMC (CL) and, as necessary, Office of the Assistant General Counsel, Installations and Environment.
4. Include requests for resources to meet air pollution control requirements in the Program Objectives Memorandum (POM)/budget submissions.
5. Implement strategies to eliminate reliance on ODSs and submit the required information to support the management of the DOD ODS Reserve.
6. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies, as required.
7. Conduct special environmental compliance and protection studies with regard to air quality management to assist in establishing policy or initiating actions.
8. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to air quality regulations.
9. Track Marine Corps progress toward meeting established air quality goals.

6301. MARINE CORPS RECS. In addition to the responsibilities identified in chapter 2 of this Manual, Marine Corps RECs must:

1. Coordinate input and comments to all applicable SIPs in their areas of responsibility.
2. Coordinate ERC trading among Marine Corps facilities.
3. Function as Marine Corps air pollution episode coordinator within the AQCRs, or portions thereof, under Marine Corps jurisdiction. Air pollution episode coordinators must ensure that air episode plans and actions are consistent in degree and timing for all Marine Corps activities in the affected episode area and also that the plans and actions are as consistent as possible with plans and actions of other Federal activities and state and local air pollution control authorities.

6302. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Identify and submit to the CMC (LF) project documentation and funding requests for air sources that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring are required to comply with air quality management requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign or approve for signature: compliance statements/certifications; emission inventory reports; construction and operation permit applications, as required, for construction of all air quality management projects; and applications for permits related to the demolition, preconstruction, and construction phases of projects, unless multi-installation permit applications will be signed by a higher authority. Assist in the preparation of permit applications and studies and sign applications and negotiate conditions with regulatory agencies for operating permits and variances to temporarily operate those sources out of compliance.
3. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished either by writing an ECPSOP document to implement all environmental requirements or by writing a separate base order to implement specifications of this chapter alone.
4. Assure that CAA general conformity rule requirements are satisfied for all applicable Marine Corps actions on the installation.
5. Survey emission sources to identify potential reductions, and where reductions are made, take reasonable steps to quantify them and acquire ERCs or comparable reduction credits/allowances in accordance with local regulations.
6. Coordinate ERC requirements/trading/disposition actions in advance with the appropriate REC and CMC(LF).
7. Submit, via the chain of command, to the CMC (LF) all instances in which compliance with fuel standards is impractical.
8. Maintain current records of physical, operational, and emission characteristics of air emission sources per reference (ax), SSIC Code 5090.4.
9. Ensure that air episode plans are developed as required, and provide copies of such plans to the REC.
10. Cooperate with the Marine Corps air pollution episode coordinator, EPA, and state and local air pollution control authorities in executing air episode plans as required for areas under the proclamation of an air pollution emergency.

11. Ensure that motor vehicles and other mobile sources comply with applicable emission standards and other requirements.
12. Develop and implement transportation control measures as required by the SIP.
13. Identify and quantify emissions growth planning requirements, and coordinate them with the REC and regulatory agencies during SIP revision planning activities.
14. Where applicable, furnish to the appropriate regulatory authority proof of compliance with applicable nondiscriminatory state and local motor vehicle I/M requirements for all vehicles operated on the installation.
15. Implement and maintain proper adjustments in stationary heating and power plant operations to reduce total emissions. Substantial fuel savings can also result from proper combustion operations and combustion air monitoring.
16. Ensure that CAA-required training and certification is provided to all applicable personnel to meet general awareness and billet-specific training requirements per chapter 5 and appendices G and H of this Manual.
17. Ensure that coordination occurs with the Safety Office when conducting risk evaluations or risk management.
18. Conduct a radon testing program for all regularly occupied buildings (includes existing and new structures), following NAVRAMP methodology for testing and quality assurance/quality control.
19. Maintain information, for each building location, on the radon levels and physical characteristics of Marine Corps facilities.
20. Identify compliance requirements for new construction and projects or modifications required for existing structures.
21. Identify and submit environmental compliance projects required to bring buildings into compliance.
22. Implement appropriate ODS procurement guidance as established by Commander, Naval Supply Systems Command and Commander, NAVFAC.
23. Ensure that ODSs are included in the "authorized HM use list."
24. Establish practices and procedures internally to reduce emissions of ODSs as much as possible.
25. Provide resources (e.g., tuition, travel, per diem) for training refrigerant technicians on recovery and recycling equipment and ensure compliance with applicable certification requirements.
26. Submit requests for waivers to any of the mandatory provisions of this policy via the chain of command.

27. Develop and implement an ODS phase-out plan to eliminate use of nonmission-critical class I ODSs and to eliminate use of nonmission-critical portable halon fire extinguishers.
28. Approve and submit plans to claimants for review and funding in the POM cycle.
29. Develop and implement a plan for ODS system leak checks, tracking periodic leak rate and required equipment replacement, supply management, and recycling and reclamation of Class I and Class II ODSs.
30. Ensure that required plans meet regulatory requirements.

6303. COMMANDERS OPERATING ABOARD MARINE CORPS INSTALLATIONS

1. Comply with all applicable air quality regulations and coordinate with the installation environmental staff for compliance requirements, including the preparation of permit applications and environmental studies.
2. Per chapter 4 of this Manual and existing tenant/host agreements, identify and submit environmental compliance projects that are necessary to bring air sources into compliance.

REFERENCES

- (a) 42 U.S.C. 7401 et seq.
- (b) 42 U.S.C. 11001 et seq.
- (c) MCO 5090.1
- (d) MCO 5100.8
- (e) 40 CFR 61
- (f) Public Law 91-604, "1970 Clean Air Amendments," December 31, 1970
- (g) Public Law 95-95, "1977 Clean Air Amendments," November 16, 1977
- (h) Public Law 101-549, "1990 Clean Air Amendments," November 15, 1990
- (i) 40 CFR 81
- (j) 40 CFR 50
- (k) Environmental Protection Agency, "The Green Book," January 1994
- (l) 40 CFR 52
- (m) 40 CFR 60
- (n) 40 CFR 62
- (o) 40 CFR 51
- (p) "Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the CAA," EPA memo dtd 2 Aug 96
- (q) 42 U.S.C. 7409
- (r) Federal Register Volume 62, page 38651-38701, July 18, 1997
- (s) U.S. Court of Appeals, Sixth Circuit, United States v. Tennessee Air Pollution Control Board, 185 F.3d 529, July 22, 1999
- (t) Superior Court of California, Sacramento County, California v. United States, No. 98AS00723, March 18 2002 (NOTAL)
- (u) U.S. Court of Appeals, Eleventh Circuit, City of Jacksonville v. U.S. Department of the Navy, 348 F.3d 1307, October 28, 2003
- (v) 40 CFR 22
- (w) Federal Register, Volume 61, page 69360, December 31, 1996

- (x) Federal Register, Volume 67, page 41343, June 18, 2002
- (y) 40 CFR 59
- (z) 40 CFR 54
- (aa) 40 CFR 70
- (ab) 40 CFR 71
- (ac) EPA, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995
- (ad) EPA, "White Paper Number 2 for Improved Implementation of Part 70 Operating Permits Program," March 5, 1996
- (ae) EPA, "White Paper Number 3, Draft Guidance on Designing Flexible Permits," August 7, 2000
- (af) Public Law 102-486, "Energy Policy Act of 1992"
- (ag) Public Law 110-140, "Energy Independence and Security Act of 2007," 19 December, 2007
- (ah) 40 CFR 87
- (ai) EPA 420-D-99-003, "Draft Interim Guidance for Federal Facilities Compliance with CAA sections 118(c) and 118(d) and Applicable Provisions of State Vehicle Inspection and Maintenance Programs," December 1999
- (aj) Federal Register, Volume 66, page 5002, January 18, 2001
- (ak) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (al) 40 CFR 63
- (am) Public Law 99-499, "Superfund Amendments and Reauthorization Act," October 17, 1986
- (an) 29 CFR 1910
- (ao) EPA, "Interim Air Quality Policy on Wildland and Prescribed Fires," April 23, 1998
- (ap) 40 CFR 82
- (aq) United Nations Environment Programme, "Montreal Protocol on Substances that Deplete the Ozone Layer," 2000
- (ar) 10 U.S.C. 2687
- (as) Public Law 101-510, "Defense Base Closure and Realignment Act," November

5, 1990

(at) 10 U.S.C. 2571

(au) MCO 5104.3A

(av) Federal Register, Volume 38, page 8820, April 6, 1973

(ax) SECNAV M-5210.1

Table 6-1.--The CAA's Six Subchapters at a Glance

Sub-Chapter	CAA §§	USC §§	Areas of Coverage
I	101-193	7401-7515	Air Quality Control Measures; Enforcement; PSD; NSR; NSPS; Enforcement; HAPS; NAAQS; Conformity
II	202-250	7521-7590	Mobile Sources and Fuels
III	301-328	7601-7627	Enforcement and Definitions
IV-A	401-416	7651-7651o	Acid Rain Control
V	501-507	7661-7661f	Federal Permit Program
VI	601-618	7671-7671q	ODSs

Table 6-2.--Threshold Rates for Criteria Pollutants  
or Precursors in Nonattainment Areas

	Tons/year
Ozone (VOCs or NO <sub>x</sub> )(1-hour standard)*:	
Serious nonattainment areas	50
Severe nonattainment areas	25
Extreme nonattainment areas	10
Other ozone* nonattainment areas outside an ozone transport region	100
Marginal and moderate nonattainment areas inside an ozone* transport region:	
VOC*	50
NO <sub>x</sub> *	100
Carbon monoxide: All nonattainment areas	100
SO <sub>2</sub> or NO <sub>2</sub> : All nonattainment areas	100
PM <sub>10</sub> :	
Moderate nonattainment areas	100
Serious nonattainment areas NAAs	70
PM <sub>2.5</sub> (and all precursors):	100
Pb: All nonattainment areas	25

\* The ozone precursor (NO<sub>x</sub> and VOC) thresholds listed are for the 1-hour ozone NAAQS; however, it is anticipated that the final implementation rule for the 8-hour ozone NAAQS and/or any revision to the General Conformity Rule will apply the same thresholds for the various nonattainment area classifications.

Table 6-3.--Threshold Rates for Criteria Pollutants  
 or Precursors in Maintenance Areas

	Tons/year
Ozone (NO <sub>x</sub> )*, SO <sub>2</sub> , or NO <sub>2</sub> : All maintenance areas*	100
Ozone (VOCs)*:	
Maintenance areas inside an ozone* transport region	50
Maintenance areas outside an ozone* transport region	100
PM <sub>10</sub> : All maintenance areas	100
CO: All maintenance areas	100
PM <sub>2.5</sub> (and all precursors):	100
Pb: All maintenance areas	25

\* The ozone precursor (NO<sub>x</sub> and VOC) thresholds listed are for the 1-hour ozone NAAQS; however, it is anticipated that the final implementation rule for the 8-hour ozone NAAQS and/or any revision to the General Conformity rule will apply the same thresholds for the various maintenance area classifications.

CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

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CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

SECTION 1: INTRODUCTION

7100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for emergency planning and response. This chapter also identifies procedures for preventing and providing proper training for oil discharges and HS releases to the air, land, and water. It outlines the Marine Corps organizational structure for response to its own spills as well as to non-Marine Corps spills that occur on and off an installation. Finally, the chapter identifies the responsibilities of installation commanders; handlers of POLs and HSS; and response team members.

7101. APPLICABILITY

1. See paragraph 1101.
2. For Marine Corps activities OCONUS, international oil pollution laws require that marine oil spills that impact, or may impact, the waters or shoreline of any coastal nation must be reported immediately to proper authorities in that nation.

7102. BACKGROUND

1. Provisions within the major statutes, as described below, recognize the need for emergency planning for uncontrolled releases of pollutants to the Nation's air, land, and water. Accordingly, these statutes require facilities with the potential for such releases to develop procedures to prevent releases, to provide written emergency procedures, and to implement the response provisions in the event of a release. Further, reference (a) requires that comprehensive information be provided to the public about possible or potential hazards associated with toxic, hazardous, and extremely hazardous chemical releases.
2. Many of these statutes contain overlapping requirements. The National Response Team (NRT) on June 5, 1996, published its ICP Guidance contained in reference (b), enabling facilities to meet multiple plan requirements in a single plan. Marine Corps installations are encouraged, as appropriate, to use this guidance.
3. Many state regulatory programs contain provisions for oil and hazardous substance (OHS) spill contingency planning and for notification of state and local authorities when OHS spills occur. Most state regulations complement the Federal OHS spill contingency planning and response efforts. However, some state regulations are more stringent than the Federal requirements. Each Marine Corps installation should obtain copies of its respective state regulations to determine if it is subject to state requirements that go beyond the Federal laws and regulations outlined herein.

7103. FEDERAL STATUTES

1. Water Quality Act (WQA) of 1965 (Public Law 89-234), Water Quality Improvement Act of 1970 (Public Law 91-224), Federal Water Pollution Control Act (FWPCA) of 1972, as Amended (33 U.S.C. 1251 et seq.), and Clean Water Act (CWA) of 1977, as Amended (33 U.S.C. 1251 et seq.)

a. The WQA provided Federal assistance for the establishment and enforcement of jurisdictional water quality standards for surface waters. It was amended in 1970 by the Water Quality Improvement Act to prohibit releases of oil and sewage into navigable waters.

b. The FWPCA made the EPA responsible for setting nationwide effluent standards on an industry-by-industry basis. This Act provided effluent and water quality standards and instituted a permit system for the regulation of oxygen-demanding pollutant discharges. In 1977, the Act was amended by the CWA which refocused the enforcement tools of the FWPCA on the control of toxics. The CWA amended the permit system, which is now the NPDES. The CWA was amended in 1987 to include the regulation of storm water runoff and to strengthen enforcement mechanisms. The intent of the CWA is to restore and protect the integrity of the Nation's waters by controlling discharges of pollutants, including OHS spills, into those waters.

c. The CWA contains the following national policy: There should be no discharges of oil or HSS into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone; or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1977; or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson-Stevens Fishery Conservation and Management Act of 2006).

d. Section 311 of the CWA addresses OHS liability. Important statutory requirements contained in section 311 are summarized as follows:

(1) Section 311(b)(3) prohibits the discharge of oil or HSS in harmful quantities into or upon the navigable waters of the United States. As noted in 40 CFR 110.3, discharges of oil in harmful quantities include those that violate applicable water quality standards, cause a film or sheen upon, or discoloration of, the water surface or adjoining shorelines, or cause a sludge or emulsion to be deposited beneath the water surface or upon adjoining shorelines.

(2) Section 311(b)(5) requires the individual in charge of an onshore facility to notify immediately the United States Government of any discharge of oil or HS from the facility in violation of section 311(b)(3). Failure to notify the Government is punishable by a fine or by imprisonment for no more than five years or both.

(3) Section 311(b)(6) provides for various classes of administrative penalties for violating the OHS discharge prohibition or for failure to comply with regulations pertaining to Oil Facility Response Plans (FRPs) under the National Response System.

(4) Section 311(b)(7) provides for civil penalty actions for violating the OHS discharge prohibition or for failure to comply with regulations pertaining to Oil FRPs under the National Response System.

(5) Section 311(c) authorizes the Federal Government to ensure the effective and immediate removal of a discharge, and the mitigation or prevention of a substantial threat of discharge, of oil or an HS.

(6) Section 311(d) requires the development and revision of a National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which provides for organizational structure and procedures necessary to prepare for, and respond to, oil discharges and releases of HSS, contaminants, and pollutants. It assigns responsibilities for contingency planning and response to various Federal agencies, including the DOD, and outlines state and local government and public and private interest group participation in these areas. The NCP also specifies notification procedures for certain oil discharges and HS releases.

(7) Section 311(e) provides for civil enforcement procedures, including orders to protect public health, for violating the OHS discharge prohibition, or for failure to comply with regulations pertaining to Oil FRPs under the National Response System.

(8) Section 311(f) specifies liability limits for discharges. This section further authorizes the President (and installation commanders as duly appointed representatives) to act on behalf of the United States to recover all costs for restoring or replacing natural resources damaged by OHS spills.

(9) Section 311(j) establishes the National Response System. This section requires the President to issue regulations mandating the development of Oil FRPs by owners or operators of tank vessels and oil transfer and storage facilities.

(10) Section 311(m) requires facilities to maintain records, to allow entry and inspection of premises, and to provide public access to records.

2. Oil Pollution Act (OPA) of 1990 (Public Law 101-380, 33 U.S.C. 2701 et seq.)

a. The OPA amends section 311 of the CWA to augment Federal response authority, to increase penalties for oil spills, to expand the organizational structure of the Federal response framework, and to provide an emphasis on preparedness and response activities. The OPA requires contingency planning for "worst case" discharges and demonstrated response capabilities through planning, equipment, training, and exercises and does not preempt states' rights for establishing more stringent planning requirements.

b. Important statutory requirements of the OPA are summarized as follows:

(1) Section 1002 specifies that each responsible party for a vessel or a facility from which oil is discharged, or which poses the substantial threat of a discharge of oil, into or upon the navigable waters, adjoining shorelines, or the exclusive economic zone is liable for removal costs and damages that result from the discharge. Damages can include those for natural resources, real or personal property, subsistence use of natural resources, loss of revenue, loss of profits or impairment of earning capacity, and provision of public services during or after removal activities.

(2) Section 1003 establishes defenses to liability, such as discharges due to acts of God, acts of war, an act or omission by a third party, or any combination thereof.

(3) Section 1004 establishes limits of liability for responsible parties.

(4) Section 1006 specifies conditions pertaining to damages to natural resources. The President has designated Marine Corps installation commanders as the Federal trustees for all natural resources under their control.

(5) Section 1011 specifies Presidential consultation with the affected trustees on the appropriate removal action to be taken in connection with any discharge of oil.

(6) Section 1012 discusses uses of the Oil Spill Liability Trust Fund.

(7) Section 1018 specifies that the OPA must not be construed to authorize or create a cause of action against a Federal officer or employee in the officer's or employee's personal or individual capacity for any act or omission while acting within the scope of the officer's or employee's office or employment.

(8) Section 2002 of the OPA amends section 311 of the CWA. A discussion of section 311 as amended by the OPA is presented in paragraph 7103.2, above.

3. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as Amended (42 U.S.C. 9601 et seq.)

a. Since the initial passage of CERCLA, Congress has amended it over 20 times. CERCLA authorizes Federal action to respond to the release or threatened release of an HS from any source into the environment. Remedial actions (RAs) for past releases are covered by the Installation Restoration program, which is discussed in chapter 10 of this Manual.

b. Important statutory requirements of CERCLA pertaining to emergency planning and response are summarized as follows:

(1) Section 102 directs the EPA Administrator to promulgate and revise regulations that designate as HSS such elements, compounds, mixtures,

solutions, and substances that, when released into the environment, may present substantial danger to the public health or the environment. These regulations also must specify the quantities of any released HS that necessitates a report to the National Response Center (NRC).

(2) Section 103 requires the individual in charge of an onshore facility to notify immediately the NRC of any release from the facility of an HS equal to or in excess of the reportable quantity (RQ) established by regulation pursuant to section 102. Section 103 also establishes civil and criminal penalties for failure to notify the NRC in the event of a release.

(3) Section 104 authorizes the Federal Government to ensure the effective and immediate removal and remediation of a release, and the mitigation or prevention of a substantial threat of release, of an HS, contaminant, or pollutant that may pose an imminent and substantial danger to public health, welfare, or the environment.

(4) Section 105 requires that the NCP be revised to include a national HS response plan to the NCP which was developed under the CWA.

(5) Section 106 authorizes the President to take any necessary measures, including securing judicial orders, to protect public health from an actual or threatened HS release.

(6) Section 107 specifies conditions of liability for costs incurred for the removal or remedial action taken to abate a release; other necessary costs; damages to, or destruction of, natural resources; or health assessment study costs. This section further establishes defenses to liability, such as discharges due to acts of God, acts of war, acts or omission by a third party, or any combination thereof. Section 107 also establishes limits to liability. It authorizes the President (and installation commanders as duly appointed representatives) to act on behalf of the United States to recover all costs for restoring or replacing natural resources.

(7) Section 109 provides for civil penalty actions for violating the HS release prohibition or for failure to comply with applicable regulations promulgated under CERCLA.

(8) Section 120 applies CERCLA to Federal departments, agencies, and installations in the same manner as any nongovernmental entity. Section 120(j) authorizes the President, when necessary, to protect the national security interests of the United States, to issue site-specific orders at any DOD facility to exempt it from compliance with any CERCLA title I or SARA title III requirement. The exemption must be for a specified period not to exceed one year, although additional exemptions may be granted upon suitable justification.

(9) Section 310 allows citizens to file suits in a United States District Court against any individual, including a Marine Corps installation, allegedly violating CERCLA requirements.

4. RCRA of 1976 (42 U.S.C. 6901 et seq.)

a. Congress enacted RCRA to protect human health and the environment from the hazards associated with HW generation, transportation, treatment, storage, and disposal. Major revisions resulted from the Hazardous and Solid Waste Amendments (HSWA), and the Federal Facility Compliance Act (FFCA).

b. Subtitle C of RCRA requires the owners and operators of HW facilities to develop comprehensive HW management plans that address spill prevention and cleanup for these facilities. If the facility has already prepared an emergency or contingency plan (e.g. SPCC Plan) in accordance with other regulations, the existing plan can be amended to incorporate HW management provisions.

c. Important statutory requirements of RCRA pertaining to emergency planning and response are summarized as follows:

(1) Section 3004(a)(5) requires the EPA Administrator to develop regulations applicable to owners and operators of HW treatment, storage, and disposal facilities (TSDFs) pertaining to contingency plans to minimize unanticipated damage from treatment, storage, or disposal of any HW.

(2) Section 3007 specifies the rights of the EPA and state agency personnel to enter and inspect the premises, facilities, and records of TSDF owners or operators to determine compliance with applicable requirements of RCRA. Section 3007(c) authorizes annual EPA and state inspections of Federal facilities.

(3) Section 3008 provides for Federal enforcement of RCRA requirements, including compliance orders issuance and civil and criminal penalties assessment for RCRA violations.

(4) Section 3013 authorizes the EPA Administrator to order the owner or operator of a TSDF suspected of releasing any HW that may impact human health or the environment to conduct such monitoring, testing, analyzing, and reporting as the EPA Administrator deems necessary.

(5) Section 3016 requires each Federal agency to commit to an ongoing biannual program to complete, publish, and submit to EPA and authorized states an inventory of each site that the agency owns, operates, or has owned or operated, at which HW has been treated, stored, or disposed of at any time. The inventory must describe any response actions initiated or contemplated at contaminated sites.

(6) Section 6001 requires that the following comply with all Federal, state, interstate, and local requirements: instrumentalities of the Federal Government Executive Branch, such as Marine Corps activities which have solid waste (SW) management facilities or disposal sites or which engage in activities that potentially result in SW or HW disposal or management.

(7) Section 7002 provides for citizen suits to be filed against any individual or the United States, allegedly in violation of any permit, standard, regulation, condition, requirement, prohibition, or order which has become effective pursuant to RCRA.

(8) Section 7003 authorizes the EPA Administrator to bring suit in United States District Court against any individual or a Marine Corps installation, that is presenting an imminent and substantial danger to human health or to the environment due to present or past HW management practices.

(9) Section 9003 prescribes requirements for promulgating Underground Storage Tank (UST) regulations for release detection, prevention, and correction regulations (see chapter 18 of this Manual for further discussion of these regulations).

5. CAA of 1970, as Amended (42 U.S.C. 7401 et seq.)

a. The CAA is the Federal statute mandating the prevention and control of air emissions from both stationary and mobile sources.

b. The CAA Amendments of 1990 added section 112(r), entitled "Prevention of Accidental Releases." The purpose of this section is to prevent the accidental release and to minimize the consequences of any such release of any regulated or EHS. The essential provisions of section 112(r) are as follows:

(1) Subsection 112(r)(1) requires that section 112(r) must not be interpreted, construed, implied, or applied to create any liability or basis for compensatory suit for bodily injury or any other injury or property damages to any person which may result from accidental releases of substances regulated under section 112(r).

(2) Subsections 112(r)(3) - (5) require the EPA Administrator to promulgate a list of substances that, in the case of an accidental release, are known to cause death, injury, or serious adverse effects to human health or the environment. The list also includes a threshold quantity for each substance, which accounts for its toxicity, reactivity, volatility, dispersability, combustibility, or flammability, and the amount which would result in death, injury, or serious and adverse effects to human health in the event of a release. The complete list of high-risk air pollutants is published as table 1 in 40 CFR 63.74.

(3) Subsection 112(r)(6) establishes an independent Chemical Safety and Hazard Investigation Board, which is responsible for investigating the cause of accidental releases of regulated substances resulting in a fatality, serious injury, or substantial property damages, for recommending ways to reduce the likelihood or consequences of accidental releases, and for establishing regulations for facilities to report accidental releases of regulated substances into the air.

(4) Subsection 112(r)(7)(A) authorizes the EPA Administrator to promulgate release prevention, detection, and correction requirements, including monitoring; recordkeeping; reporting; training; vapor recovery; secondary containment; and other design, equipment work practice, and operational requirements.

(5) Subsection 112(r)(7)(B) authorizes the EPA Administrator to promulgate regulations and guidelines to provide for the prevention and

detection of accidental releases by owners and operators of such release sources. After this regulation is promulgated, subsection 112(r)(7)(E) makes it unlawful for any individual to operate in violation of these requirements any stationary source subject to them.

(6) Subsection 112(r)(9) authorizes the EPA Administrator to issue orders to, or to bring suit in United States District Court against, any individual or a Marine Corps installation presenting an imminent and substantial danger to human health or to the environment because of an actual or threatened accidental release of a regulated substance.

6. EPCRA of 1986 (42 U.S.C. 11001 et seq.). This Act, which is title III of SARA, is intended to encourage and support emergency planning and to provide timely and comprehensive information to the public about possible or potential hazards associated with chemicals present at the facility and toxic chemical releases. Most notably, specific sections of EPCRA require immediate notification of releases of EHSs and HSSs defined under CERCLA to state and local emergency response planners. EPCRA requires state and local coordination in planning response actions to chemical emergencies. The Act also requires the submission of information on chemical inventories and releases.

#### 7104. REQUIREMENTS

##### 1. General

a. Statutory Requirements. The statutes discussed in paragraph 7103 require regulated Marine Corps-owned and -operated activities to develop and implement various emergency response plans (ERPs) and to conduct related activities:

- (1) SPCC Plans mandated by reference (c).
- (2) FRPs mandated by reference (d).
- (3) Oil and Hazardous Substance Spill Contingency Plans (OHSSCPs) mandated by the CWA and by reference (e).
- (4) HW Facility Contingency Plans mandated by reference (f).
- (5) Air Emissions RMPs mandated by the reference (g).
- (6) Notifying the State Emergency Response Commission (SERC) that the facility is subject to emergency planning requirements, designating a Facility Emergency Coordinator (FEC), and notifying the Local Emergency Planning Committee (LEPC) of the FEC's identity as mandated by reference (a).
- (7) Participating in development of a Community Comprehensive Emergency Response Plan mandated by reference (a).
- (8) Filing an Emergency and Hazardous Chemical Inventory Form mandated by reference (a).

(9) Filing a TRI Reporting Form (Form R) mandated by reference (a).

b. Regulatory Requirements. This section discusses regulations promulgated by various Federal agencies to implement the statutory requirements identified above. These agencies include EPA, United States Coast Guard, the DOT Research and Special Programs Administration (RSPA), the Department of the Interior (DOI) Minerals Management Service (MMS), the Occupational Safety and Health Administration (OSHA), the National Oceanic and Atmospheric Administration (NOAA), and the DOI USFWS.

c. E.O. Requirements. Several E.O.s issued by the President direct executive agencies, including the military departments, to comply with applicable requirements of Federal laws. The EOs pertaining to emergency planning and response are as follows:

(1) Reference (h) requires Federal facilities to comply with pollution control requirements pursuant to references (c), (f), (g), (i), (j), (k), (l), and (m).

(2) Reference (n) designated the Federal agencies that would form the NRT. In addition to placing the DOD on the NRT, the President also designated the SECDEF as a Federal trustee for natural resources. The President further delegated to the SECDEF the President's response authorities for releases or threatened releases from or on Federal facilities.

(3) Reference (o) amended reference (n) to implement provisions of reference (d). Reference (o) also delegated the President's responsibilities for promulgating regulations pertaining to oil FRPs to the EPA Administrator and to the Secretary of the department in which the Coast Guard operates.

(4) References (p) and (q) require all installations to comply with sections 301-313 of reference (a).

d. DOD Requirements. Several directives and instructions issued by DOD, mandating the military departments to comply with applicable requirements of Federal laws, pertain to emergency planning and response as follows:

(1) Oil and Hazardous Substances Pollution Prevention and Contingency Program. A DOD OHS Pollution Prevention and Contingency Program is required of DOD installations for responding to OHS discharges in a manner consistent with reference (r). Regulated installations must develop and implement SPCC plans and OHSSCPs.

(2) Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, regional, and intrastate statutory and regulatory environmental requirements. DOD policy identifies the Department of the Navy (DON) as the DOD Executive Agent for the NRT and Regional Response Team (RRT).

e. Integrated Contingency Plan (ICP) Guidance

(1) The NRT, in conjunction with representatives from state and local agencies, industry, and environmental groups, has developed the ICP Guidance contained in reference (b) to provide facilities with a way to consolidate multiple contingency plans into a single functional response plan. The EPA, Coast Guard, RSPA, OSHA, and MMS signed the ICP Guidance and agree that integrated response plans prepared in the format provided by reference (b) will be acceptable and will be the Federally preferred method of response planning.

(2) The purposes of the ICP Guidance are to:

(a) Provide a mechanism for consolidating multiple FRPs into one plan that can actually be used in an emergency.

(b) Improve coordination of planning and response activities within the facility and with public and commercial responders.

(c) Minimize duplication and simplify plan development and maintenance.

(3) The ICP Guidance addresses planning requirements in the following Federal regulations:

(a) Sections 20 and 21 of reference (s), subpart F of reference (t), and references (u) and (v).

(b) Subpart G of reference (w), reference (s), and subpart D of references (x) and (y).

(c) Sections 38, 119, and 120 in reference (z).

(4) The ICP Guidance format includes the following three sections:

(a) Plan introduction.

(b) A core plan that serves as the primary response tool.

(c) A series of annexes that provide more detailed supporting information and regulatory compliance documentation.

(5) The ICP Guidance format is based upon the Incident Command System (ICS). This organization allows the plan to dovetail with established response management practices, thereby promoting its usefulness in an emergency. The ICP Guidance format also promotes a system of linkages to facilitate coordination with other facility plans as well as external plans, such as the LEPC Comprehensive Emergency Response Plan and the OPA Area Contingency Plan (ACP).

(6) Obtain copies of the ICP Guidance by contacting the EPCRA Hotline at 1-800-535-0202.

f. Protective Booming. Protective booming strategies shall be developed and implemented for POL transfer operations when any of the following conditions exist:

(1) Protective booming is required by law or regulation.

(2) The nature or volumes of fuels to be transferred is of sufficient magnitude that prudent operational risk management indicates that protective booming is required.

(3) When environmentally sensitive areas are likely to be negatively impacted in the event of a spill.

(4) When a potential spill could generate significant negative public perception or so adversely affect political relations with a host nation or local jurisdiction that continued port access may be jeopardized.

## 2. SPCC

a. Purpose. SPCC plans have two primary purposes:

(1) To establish procedures to prevent an oil spill into waters of the United States.

(2) To document existing oil spill prevention structures, procedures, and equipment and to recommend additional containment structures if needed.

b. Facilities Required to Prepare SPCC Plans

(1) EPA regulations in section 3(a) in reference (s) require owners or operators of onshore and offshore nontransportation-related facilities that have discharged or, due to their location, might discharge oil in harmful quantities into or upon navigable waters of the United States or adjoining shorelines to prepare an SPCC plan in accordance with requirements provided in section 7 of reference (s).

(2) EPA regulations in section 3(c) of reference (s) require Marine Corps units which deploy portable, tactical refueling equipment, such as sixcons and collapsible fabric tanks, to prepare and implement an SPCC plan. For these portable facilities, the SPCC plan may be a general plan prepared using good engineering practice per requirements provided in section 7 of reference (s). A new SPCC plan need not be prepared each time the facility is moved to a new site. When the equipment is redeployed to a new site, it must be located and installed using the spill prevention practices outlined in the SPCC plan for the facility. The SPCC plan applies only when the portable facility is in a fixed operating mode. During training exercises or deployments within the United States, mobile or portable facilities subject to this regulation must not operate unless the SPCC plan has been implemented.

(3) The regulations do not require SPCC plans for onshore fixed or portable facilities if:

(a) The facility has an aggregate aboveground storage capacity of 1,320 gallons (gal) or less of oil, has no single container capacity that exceeds 660 gal, and has a total underground storage capacity of 42,000 gal or less.

(b) The facility, due to its location, is not expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines. This determination is based solely upon consideration of the geographical and locational aspects (e.g., proximity to navigable waters or adjoining shorelines, land contour, drainage patterns, proximity to fish and wildlife and sensitive environments) of the facility and must exclude man-made dikes or other structures which would serve to hinder, contain, or otherwise prevent an oil discharge from reaching navigable waters or adjoining shorelines.

c. Plan Contents. Section 7 of reference (s) provides general requirements for the preparation and implementation of SPCC plans. The SPCC plan should be carefully considered and should follow the sequence outlined below:

- (1) A description of the physical layout of the facility.
- (2) A facility diagram marking the location and contents of each tank, including completely buried tanks, transfer stations, and connecting pipes.
- (3) The type of oil in each container and its storage capacity.
- (4) Discharge prevention measures including procedures for routine handling or products (e.g., loading, unloading, and facility transfers).
- (5) Discharge or drainage controls, such as secondary containment, around containers and other structures and equipment, and procedures for the control of a discharge.
- (6) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor).
- (7) Methods of disposal of recovered materials in accordance with applicable legal requirements.
- (8) Contact list and phone numbers for the facility response coordinator; NRC; cleanup contractors with whom the facility has an agreement for response; and all appropriate Federal, state, and local agencies who must be contacted in case of a discharge.
- (9) If the implementation of appropriate containment measures or diversionary structures is not practicable, section (d) of reference (s) requires that the facility owner or operator clearly explain such impracticability, and provide to the EPA Regional Administrator the following:

(a) An oil spill contingency plan following the provisions of reference (aa).

(b) A written commitment to manpower, equipment, and materials required for the expeditious control and removal of any harmful quantity of discharged oil.

d. Plan Certification. As specified in section (d) of reference (s), each SPCC plan must be certified initially by a registered professional engineer (PE). In addition, section 5(b) of reference (s) directs the owner or operator of the facility to review, update, and amend the plan at least once every five years. As specified in section 5(c) of reference (s), no amendment to an SPCC Plan can satisfy the requirements unless it has been certified by a PE.

e. Plan Availability. A complete copy of each SPCC plan must be maintained at the subject facility, as required in section 3(e) of reference (s). The SPCC plan also must be available to EPA representatives for on-site review during normal working hours.

f. Plan Amendments

(1) Under section 4 in reference (s), the EPA Regional Administrator may require the owner or operator of a facility to revise its SPCC plan if the facility, within any 12-month period, has discharged more than 1,000 gal of oil in a single discharge, or has discharged more than 42 gal of oil in each of two discharges into or upon United States navigable waters.

(2) Under section 5 in reference (s), the owner or operator of a facility must amend its SPCC plan whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for discharging oil. The amendments must be fully implemented no later than six months after such change occurs.

g. References. To prepare and implement oil SPCC plans, activities can use references (ab) and (ac), prepared by the DOD CWA Services Steering Committee and available on the Defense Environmental Network Information Exchange.

3. FRPs

a. Purpose. The purpose of an FRP is to ensure that appropriate successful removal actions will be initiated in response to oil discharges.

b. Facilities Required to Prepare FRPs. Reference (d) amended section 311(d) of reference (c) to require facilities to prepare contingency plans for "worst case" discharges and to demonstrate response capabilities through planning, equipment, training, and exercises. Facilities that store, transport, or handle oil and meet the threshold requirements of reference (d) must develop a FRP. Facilities subject to these requirements include the following:

(1) Nontransportation-related onshore facilities, regulated by EPA in

section 20 of reference (s).

(2) Marine transportation-related facilities, regulated by the Coast Guard in reference (t).

(3) Bulk packaging containing oil, regulated by the DOT RSPA in reference (ad).

(4) Onshore oil pipelines, regulated by the RSPA in reference (u).

(5) Offshore facilities and pipelines, regulated by the DOI MMS in reference (v).

c. Nontransportation-Related Onshore Facilities

(1) Reference (d) required facilities to submit oil response plans to EPA by February 18, 1993. Reference (d) also stated that a facility may operate without an EPA-approved response plan for up to two years after the facility submits the plan for review, provided that the owner or operator has certified, by contract or other approved means, the personnel and equipment availability necessary for a worst case discharge response.

(2) EPA regulations in section 20 of reference (s) require the owner or operator of any nontransportation-related onshore facility that, because of its location, might cause substantial harm to the environment by discharging oil into or upon navigable waters of the United States or adjoining shorelines to prepare a FRP that satisfies the requirements of section 20 in reference (s), and to submit the plan to the cognizant EPA Regional Administrator.

(3) Facilities that meet the following criteria, when applied in accordance with the flowchart in attachment C-I to appendix C of section 20 in reference (s), must prepare and

submit a response plan and conform to all applicable requirements in section 20 of reference (s):

(a) A facility that transfers oil over water to or from vessels and has a total storage capacity greater than or equal to 42,000 gal.

(b) A facility with a total oil storage capacity greater than or equal to 1 million gal and which meets one of the four criteria provided in sections 12(f)(1)(ii)(A)-(D) of reference (s).

(4) The owner or operator of a facility located aboard a Marine Corps installation who determines that the facility, because of its location, is not expected to cause substantial harm to the environment by discharging oil into or upon United States navigable waters or adjoining shorelines must complete and maintain at the facility the certification form contained in appendix C of reference (s). The owner/operator should also send a copy to the cognizant regulatory agency.

(5) As required in section 20(g) of reference (s), an FRP must be

consistent with the requirements of reference (r) and the applicable ACP. It should also be coordinated with the local community emergency response plan developed by the LEPC under reference (a). The facility must review annually the relevant portions of reference (r) and applicable ACP and, if necessary, revise its plan to ensure consistency with the two. Figure 7-1 depicts the relationships of these plans with the FRP.

(6) The FRP must follow the format outlined in appendix F of section 20 of reference (s). If it does not, the plan should at least include an emergency response action plan, as set forth in section 20(h)(1) of reference (s), and be supplemented with a cross-reference section to identify the location of elements listed in paragraphs (h)(2) through (h)(10) of section 20 of reference (s).

d. Marine Transportation-Related Onshore Facilities

(1) Per Coast Guard regulations in reference (t), an oil FRP is required of the owner or operator of any mobile or fixed facility that is capable of transferring bulk oil or HM to or from a vessel with a capacity of 250 barrels (10,500 gal) or more and which, because of its location, might cause substantial harm to the environment by discharging oil into or upon navigable waters of the United States or adjoining shorelines.

(2) The FRP must follow the format outlined in subpart F of reference (t) and must be submitted to the appropriate Captain of the Port (COTP).

(3) Section 1041 in reference (t) contains specific response information which mobile facilities must maintain.

(4) As required in Section 1050 in reference (t), the response plan must identify the training to be provided to each individual with responsibilities under the plan. It also must detail the type and frequency of response drills to be conducted under the plan, which are specified in section 1055 of reference (t). See section 1057 in reference (t) for spill response equipment I/M requirements.

e. Bulk Packaging Containing Oil

(1) RSPA regulations in section 1 of reference (ad) prescribe prevention, containment, and response requirements of the DOT applicable to oil transportation. These requirements apply to any petroleum oil in packaging having capacities of 3,500 gal or more and any oil in a quantity of 42,000 gal or more per packaging. This regulation applies to Marine Corps fuel storage and transportation equipment such as 5,000-gal fuel tankers.

(2) RSPA regulations in sections 11 and 31 of reference (ad) prohibit any person, including Marine Corps units and activities, from transporting oil in a bulk packaging unless a readily available document indicating that the shipment contains oil is in the possession of the transport vehicle operator during transportation and has a current written response plan. The regulations do not require the plan to be submitted to RSPA unless the bulk packaging is greater than 42,000 gal.

(3) As specified in section 31 of reference (ad), the plan must:

(a) Describe the necessary response methods in the event of a discharge during transportation.

(b) Account for the maximum potential discharge.

(c) Identify who will respond to the discharge.

(d) Identify the appropriate persons and agencies, including the NRC, to be contacted in the event of a discharge, along with their telephone numbers.

(4) The owning unit or activity must maintain a copy of the plan at its headquarters location and at each location where vehicle dispatching occurs.

(5) Marine Corps installations through which a railroad passes that transports oil by train should request a copy of the railroad's response plan for the response zone in which the installation is located.

f. Onshore Oil Pipelines

(1) RSPA regulations in reference (u) require the owner or operator of any onshore pipeline that, because of its location, might cause substantial harm to the environment by discharging oil into or upon navigable waters of the United States or adjoining shorelines to prepare a request for proposal that satisfies the requirements of section 20 in reference (s) and to submit the plan to the RSPA. Section 101 of reference (u) specifies exceptions to this requirement.

(2) Pipeline operators must determine the worst case discharge in each response zone according to procedures specified in section 105 of reference (u).

(3) The FRP must meet the requirements prescribed in section 107 of reference (u), contain the information summary requirements specified in section 113 of reference (u), and list response resources as required in section 115 of reference (u).

(4) Section 121 in reference (u) specifies that response plans must be reviewed every five years.

(5) Marine Corps installations through which passes a commercially-owned or -operated oil or HS pipeline should request a copy of the pipeline operator's response plan for the response zone(s) in which the installation is located.

g. Oil Complexes. Oil complexes which are subject to more than one Federal agency and are required to develop response plans under each agency's regulations can prepare a single plan using reference (b) discussed in paragraph 7104.1e of this Manual. The plan can be supplemented with a cross-reference section to identify the locations of all required elements for each

agency's regulation and, in the case of EPA requirements, include an emergency action plan as specified in section 20(h)(1) of reference (s). The plan should be submitted to each of the regulatory agencies.

h. Reference. For more information on FRPs, refer to reference (ae).

#### 4. OHSSCPs

a. Purpose. The purposes of OHSSCPs are to identify those areas where spill incidents are likely to occur and to predetermine responses appropriate to future spills and releases.

b. Facilities Required to Prepare OHSSCPs. Any facility that stores oil or HS and does not meet Federal requirements for preparing a FRP shall maintain an OHSSCP.

#### c. On-Scene Coordinator (OSC) Planning Responsibilities

(1) Section 120(c) of reference (r) predesignates the DOD as the Federal OSC for HS releases when the release is on, or the sole source of the release is from, any DOD facility or vessel. In section 120(d) of reference (r), the DOD is also designated as the removal response authority for incidents involving DOD military weapons.

(2) Since the DOD does not provide Federal OSCs for DOD component HS releases, the individual services predesignate and provide their own Federal OSCs. The CMC (LF) has designated each installation's CG/CO to serve as the Federal OSC for Marine Corps HS releases originating aboard or threatening the installation. This authority may not be delegated. Figures 7-2 and 7-3 show the personnel relationships of the Marine Corps OSC for oil and HS pollution response incidents, respectively.

(3) As the Federal OSC, the installation CG/CO should predesignate an On-Scene Commander (OSCDR) to manage and direct all response operations for the activity. The OSCDR should be accustomed to obligating and managing resources. The OSCDR leads the On-Scene Operations Team (OSOT); establishes a spill reporting center; notifies OSOT members of a spill; provides the initial response, containment, and emergency functions; delegates appropriate duties to support personnel; and keeps the installation DOD/Command Duty Officer informed.

(4) For oil releases, the Federal OSC is the Coast Guard for coastal zone releases or EPA for inland zone releases. Agreements between EPA and the Coast Guard define the boundaries for Federal response actions as identified in Federal Regional Contingency Plans.

(5) Regulated installations must develop and implement OHSSCPs. These plans must be consistent with the relevant ACPs, as discussed in section 210 of reference (r).

#### d. Plan Contents

(1) The OHSSCP must be consistent with the applicable ACP as discussed in section 210 of reference (r). To obtain a copy of the local

ACP, installations located in the inland zone should contact the appropriate EPA regional office while installations located in the coastal zone should contact the appropriate Coast Guard COTP. Figures 7-4 and 7-5 display EPA Regions and Coast Guard Districts, respectively.

(2) The OHSSCP should be compatible and coordinated with the LEPC Comprehensive Emergency Response Plan for the adjacent community. Compatibility is important because a Marine Corps incident could threaten surrounding areas, and local agencies may need to request trained Marine Corps response personnel to assist during a nonmilitary incident. Marine Corps installations should contact the LEPC to obtain a copy of its response plan.

(3) The OHSSCP should include information from RCRA facility plans for those facilities located aboard the installation.

e. Plan Certification. Unlike SPCC plans, OHSSCPs do not require certification by a registered PE. However, they must be approved by the installation CG/CO.

f. Plan Amendments. The OHSSCP should be reviewed annually to incorporate any changes which have occurred in facilities aboard the installation, in the response organization, or in related plans.

g. References. For guidance on developing and implementing OHSSCPs, refer to reference (ae).

## 5. RCRA Facility Contingency Plans

a. Purpose. RCRA facility contingency plans exist to minimize hazards to human health or the environment from fires; explosions; or any unplanned sudden or nonsudden release of HW or HW constituents to air, soil, or surface water.

b. Regulated Facilities. Owners and operators of permitted HW TSDFs must develop contingency plans per section 51 of reference (x). Large Quantity Generators are also required to have formal written contingency plans and emergency procedures in the event of a spill or release per section 50 of reference (y).

### c. Plan Contents

(1) Section 52 in reference (x) specifies the contingency plan's contents. In particular, the plan must describe the actions that facility personnel must take to be in compliance with the emergency procedures specified in section 56 of reference (x).

(2) The contingency plan must include:

(a) Personnel action to fires, explosions, or unplanned sudden or nonsudden release of HW.

(b) Coordination of emergency response services with local and

state entities.

(c) Names, addresses, and phone numbers of emergency coordinators.

(d) Emergency equipment at the facility (including location, physical description, and capabilities).

(e) An evacuation plan.

(3) If the activity already has a certified oil SPCC plan that complies with applicable requirements in section 7 of reference (s), or a compliant OHSSCP, the existing plan can be amended, as noted in section 52(b) of reference (x), to incorporate HW management provisions into the existing oil SPCC plan.

(4) The contingency plan also should incorporate OSHA requirements in section 120 (p) of reference (z) for an emergency response plan to protect facility operators. These requirements include:

(a) Procedures for conducting pre-emergency planning and coordination with outside parties such as the SERC, LEPC, and local emergency response teams.

(b) Personnel roles, lines of authority/command, and lines of communication.

(c) Emergency recognition and prevention schemes.

(d) Safe distances and places of refuge during an emergency situation.

(e) Site security and access control.

(f) Evacuation routes and procedures.

(g) Decontamination procedures.

(h) Emergency medical treatment and first aid.

(i) Emergency alert and response procedures.

(j) Critique of response actions and follow-up discussions.

(k) Use of PPE and emergency equipment.

d. Plan Certification

(1) If the contingency plan is incorporated into an oil SPCC plan, it must be recertified by a registered PE. Subsequently, the plan must be reviewed, updated, and recertified by a registered PE at 3-year intervals.

(2) If the contingency plan is incorporated into an OHSSCP, it does

not require certification by a registered PE. However, it must be approved by the installation CG/CO.

e. Plan Availability

(1) As required by section 53 of reference (x), maintain complete copies of the contingency plan and all revisions at the subject facility and submit it to all local police and fire departments, hospitals, and state and local emergency response teams which may provide assistance.

(2) Provide copies of the plan to the installation fire department, the Provost Marshal's Office, the explosive ordnance demolition detachment, the Naval hospital or health clinic, and the public affairs office.

f. Plan Amendments. Under section 54 of reference (x), the owner or operator of a facility must amend its contingency plan whenever one of the following occurs:

(1) The facility permit is revised.

(2) The plan fails in an emergency.

(3) The facility changes in its design, construction, operation, maintenance, or other circumstance in a manner that materially increases the potential for fires, explosions, or releases of HW or HW constituents, or in a manner that changes the type of emergency response necessary.

(4) The list of emergency coordinators changes.

(5) The list of emergency equipment changes.

g. Reference. For information on incorporating HW management provisions into an existing SPCC plan or OHSSCP, refer to reference (ae).

6. CAA Risk Management Program

a. Purpose. A CAA risk management program provides facilities with an integrated approach to identifying and managing the hazards to human health or the environment posed by the CAA-regulated substances. Section 130 in reference (w) contains the list of regulated substances and thresholds for accidental release.

b. Facilities Required to Implement an RMP

(1) As required in section 10(a) of reference (w), an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under section 115 in reference (w), must comply with the RMP requirements no later than the latest of the following dates:

(a) June 21, 1999.

(b) Three years after the date on which a regulated substance is

first listed under section 130 of reference (w).

(c) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) Covered processes fall into one of three program categories, as specified in section 10 of reference (w):

(a) Program 1 for processes with low risk.

(b) Program 2 for processes with moderate risk.

(c) Program 3 for processes with high risk, such as those in petroleum refineries, chemical manufacturing plants, and pulp mills.

(3) A Marine Corps process is eligible for Program 1, as provided in section 12 (b) of reference (w), if it meets all of the following requirements:

(a) For the five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance led to any of the following off site: death, injury, or response or restoration activities for an exposure of an environmental receptor.

(b) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart B, and section 25 of reference (w), is less than the distance to any public receptor, as defined in section 30 of reference (w).

(c) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.

(4) When a covered process no longer meets the eligibility criteria of its program level, the owner or operator must comply with the requirements of the new Program level that applies to the process and update RMP as provided in section 190 of reference (w).

(5) Under the general requirements specified in section 12 of reference (w), the owner or operator of a covered stationary source must submit a single RMP, as provided in section 150 to 185 of reference (w). Additional requirements for each of the three program requirements also are contained in section 12 in reference (w). The RMP must include a registration that reflects all covered processes.

(6) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 requirements must develop a management system to oversee the implementation of the RMP elements, as required in section 15 of reference (w).

c. Hazard Assessment

(1) Subpart B of reference (w) contains requirements for conducting a hazard assessment for each regulated substance present at the stationary source above the threshold quantity. The purpose of each hazard assessment is to evaluate the impact of significant accidental releases of regulated substances on the public and environment.

(2) Owners and operators of Program 1 processes must analyze and report in the RMP one worst-case release scenario for each Program 1 process as provided in section 25 of reference (w) and must complete the five-year accident history as provided in section 42 of reference (w). The owner or operator of a Program 2 or 3 process must comply with all Sections in subpart B for these processes.

d. Release Prevention Programs. Owners and operators of covered processes must implement a multi-element prevention program tailored to suit the degree of hazards present at the source and the degree of complexity of the source's operations. While Program 1 facilities have no such requirements, subparts C and D of reference (w) specify the requirements for Program 2 and Program 3 Prevention Programs.

e. Emergency Response Program. Subpart E of reference (w) contains emergency response requirements for Program 2 and Program 3 processes. An emergency response program is required to prepare for response to, and mitigation of, accidental releases in order to limit the severity of such releases and their impact on the public health and environment.

f. Regulated Substances for Accidental Release Prevention. Subpart F designates substances to be listed under section 112(r) of the reference (g), identifies their threshold quantities, and establishes the requirements for petitioning to add or delete substances from the list.

g. RMP

(1) The owner or operator must submit a single RMP that includes the information required by reference (af), subpart G for all covered processes and in the method and format to the central point specified by EPA as of the date of submission. The facility owner or operator must submit the first RMP no later than the latest of the following dates:

(a) June 21, 1999.

(b) Three years after the date on which a regulated substance is first listed under section 130 of reference (w).

(c) The date on which a regulated substance is first present above a threshold quantity in a process. Subsequent submissions of RMPs must be per section 190 of reference (w).

(2) The RMP must exclude classified information. Classified data or information excluded from the RMP may be made available in a classified annex to the RMP for review by Federal and state representatives who have received

the appropriate security clearances.

h. Recordkeeping, Public Information, Air Permit, and Auditing Requirements

(1) The stationary source owner or operator must retain records supporting the implementation of the RMP. These records must be retained as specified in section 200 of reference (w) and per reference (ag), SSIC 5090.4.

(2) Although section 210 in reference (w) requires that the RMP be made available to the public, Marine Corps facilities do not have to disclose classified information except as controlled by applicable laws, regulations, or E.O.s concerning its release.

(3) Permit content and air permitting authority or designated agency requirements apply to any stationary source subject to reference (w) and references (ah) or (ai). These requirements are specified in section 215 of reference (w).

(4) The implementing agency can conduct periodic audits of the RMP, in addition to requiring revisions when necessary to ensure compliance with subpart G of reference (w), as specified in section 220 of reference (w).

7. EPCRA Reporting. In compliance with reference (p), section 2(e)(i), 3(a)(vi), and 3(g) and reference (q), all Federal agencies are required to comply with the provisions in sections 301-304 and 311-313 of reference (a), all implementing regulations, and future amendments.

a. EPCRA Section 301. Section 301 requires the establishment of SERCs, emergency planning districts, and LEPCs. In designating emergency planning districts, the SERCs must indicate which facilities subject to reference (a) are within the planning district and appoint the members of the LEPC for each emergency planning district. Marine Corps facilities subject to EPCRA reporting requirements must be represented on the local committee. Responsibilities of the LEPC are to provide public notification of committee activities, hold public meetings to discuss the emergency plan, receive and respond to public comments on the plan, receive and process requests for information, and distribute the emergency plan.

b. EPCRA Section 302. A facility that has present on site any EHS in a quantity greater than the applicable threshold planning quantity (TPQ) will provide one-time notification to the SERC and LEPC that the facility is subject to the emergency planning requirements of reference (a) for that substance. Thereafter, if an EHS becomes present at the facility in excess of its TPQ, or if the EHS list is revised and the facility has present an EHS in excess of the TPQ, the facility must notify the SERC and LEPC within 60 days after becoming subject to the requirements.

c. EPCRA Section 303. A covered facility will provide any emergency planning information requested by the LEPC for developing and implementing the LEPC's emergency plan, to the extent practical, while taking into consideration national security issues. At a minimum, a facility subject to

EPCRA reporting requirements will appoint a FEC, a facility representative to serve as a liaison with the LEPC, and notify the LEPC of that representative.

d. EPCRA Section 304. A facility where an EHS or CERCLA HS is produced, used, or stored will provide an immediate verbal and written follow-up, notice as soon as practical of a substance released over a 24-hour period, to any environmental media, that exceeds the established RQ to all SERCs and all LEPCs for areas likely to be affected by the release. This notice does not relieve the facility of any notification requirements covered under other environmental regulations. Releases that result in exposure to personnel solely within the boundaries of the facility do not require notification to the LEPC or SERC, regardless of whether the RQ for the substance was exceeded. Notification to the LEPCs or SERCs is not required for releases exempted by section 40 of reference (aj).

e. EPCRA Section 311. A facility is required to submit applicable Material Safety Data Sheets (MSDSs), or a list of the hazardous chemicals (HCs) present on site grouped by hazard category, to the SERC, LEPC, and the fire department with jurisdiction over the facility:

(1) If the HCs present on site are greater than or equal to 10,000 pounds, or the HCs are EHSs and the amount present on site is greater than or equal to 500 pounds (or approximately 55 gal), or its TPQ (whichever is less).

(2) The HCs present on site require an MSDS under OSHA.

(3) If a newly identified chemical is discovered at the facility, a MSDS or revised list of HCs must be submitted within three months to the SERC, LEPC, and the local fire department.

f. EPCRA Section 312. A facility meeting section 311 reporting requirements must submit an annual Emergency and Hazardous Chemical Inventory Form (Tier I or Tier II) for applicable HCs to the LEPC, SEPC, and local fire departments. The annual submission is due by March 1 for the previous calendar year.

g. EPCRA Section 313. A facility meeting section 313 reporting requirements must annually submit a Toxics Release Inventory Report. Report Control Symbol DD-5090-04 is assigned to this report. The annual submission is due by July 1 for the previous calendar year. Chapter 15 of this Manual includes a further discussion of section 313 requirements.

## 8. Response Training and Exercises

### a. Training Requirements

(1) Train Marine Corps installation response personnel in compliance with the OSHA requirements specified in section 120(e) in reference (z).

(2) For SPCC plans, per section 7(f) of reference (s), owners/operators must train personnel regarding operation and maintenance of equipment to prevent the discharge of oil; discharge procedure protocols;

applicable pollution control laws, rules, and regulations; general facility operations; and the contents of the facility SPCC plan.

(3) For oil FRPs, the following training requirements apply to each facility:

(a) Nontransportation-related onshore facilities regulated by EPA, per section 21(b) of reference (s), must develop and implement a facility response training program and a drill/exercise program. Section 21(b) of reference (s) recommends basing the program upon the Coast Guard's Training Elements for Oil Spill Response, as applicable to facility operations.

(b) For marine transportation-related facilities regulated by the Coast Guard, section 1050 in reference (t) identifies training requirements for facility response personnel.

(c) For bulk packaging containing less than 42,000 gal of oil regulated by RSPA, per reference (ad), the response plan need not describe the training for response personnel.

(d) For onshore oil pipelines, per Section 117 of reference (u), operators must conduct appropriate training for each individual with responsibilities under the plan and must maintain proper records for this training per reference (ag), SSIC 1510.4 for enlisted personnel, 1520.1 for officers, and 12410.4 for civilian personnel.

(4) Reference (r) does not specify training requirements for OHSSCPs.

(5) For RCRA facility contingency plans, section 16 of reference (x) specifies requirements for training HW facility personnel.

(6) For CAA risk management programs, sections 54 and 71 of reference (w), respectively, provide training requirements as part of the Program 2 and Program 3 prevention programs. In addition, section 95 of reference (w) would require the facility owner or operator to train all employees in relevant emergency response.

(7) References (aj) or (ak) do not specify training requirements for facilities subject to reference (a).

b. FRP Exercises

(1) Reference (s) does not specify exercise requirements for facilities with SPCC plans.

(2) For oil FRPs, facility drilling, and exercise requirements follow:

(a) For nontransportation-related onshore facilities regulated by EPA, section 21(c) of reference (s) requires the facility owner or operator to develop a program of facility response drills/exercises, including evaluation procedures. A program that follows the National Preparedness for

Response Exercise Program meets this requirement.

(b) For marine transportation-related facilities regulated by the Coast Guard, 1055 of reference (t) identifies drill requirements which must be included within the FRP.

(c) For bulk packaging containing less than 42,000 gal of oil regulated by RSPA, reference (ad) does not require drill information in the response plan.

(d) For onshore oil pipelines, Section 107(c)(1)(ix) of reference (u) requires the FRP to contain a section on the drill program.

(3) Although reference (r), per section 212 of reference (r), requires OSCs to conduct periodic drills of removal capability without prior notice, these requirements are designed for Federal OSCs in areas for which ACPs are required. Marine Corps OSCs, however, should conduct annual "no notice" drills to ensure that their OSCDRs and OSOTs are prepared to respond to OHS releases.

(4) No exercise requirements are specified for RCRA facility contingency plans. However, section 33 in reference (x) requires testing of facility alarm and communications systems, fire protection and spill control equipment, and decontamination equipment in order to ensure proper operation.

(5) Section 95(a)(2) in reference (w) provides drilling requirements to test and inspect emergency response equipment used for CAA risk management programs.

(6) References (aj) or (ak) do not specify exercise requirements for facilities subject to reference (a).

c. Reference. Reference (al) establishes consistent national standards for all exercises and minimum guidelines for ensuring overall preparedness within the response community. These guidelines can be obtained by contacting TASC Dept. Warehouse 33141Q, 75<sup>th</sup> Avenue, Landover, Maryland, via fax at (301) 386-5394, or via the Internet on the U.S. NRT website at <http://www.nrt.org>.

## 9. Release Notification Requirements

### a. Release Notification under the CWA

(1) EPA regulations in section 10 of reference (am) and section 21 of reference (an) specify the CWA notification requirements for oil discharges and HS releases, respectively. Immediately report all harmful quantity oil discharges and all RQ HS releases to waters of the United States from a vessel, offshore facility, or onshore facility to the NRC at Coast Guard Headquarters at (800) 424-8802 or (202) 372-2428 by voice communication.

(a) Harmful quantities of oil (and oil-derived POL) discharged to navigable waters are those amounts which, according to section 3 in reference (am), violate applicable water quality standards, cause a film on, sheen

upon, or discoloration of the water surface or adjoining shorelines, or cause sludge or emulsion to be deposited beneath the water surface or upon adjoining shorelines.

(b) EPA regulations in section 4 of reference (ao) and section 3 of reference (an) specify the HS designated under reference (c) and their RQs, respectively.

(2) Do not delay notification for lack of information or for the RQ to be reached when the release cannot be stopped in a timely manner. Immediately voice notify the NRC, thereby fulfilling Federal notification requirements and ensuring that the predesignated EPA or Coast Guard Federal OSC will be notified. Per Coast Guard regulations in section 203 of reference (ap), if direct reporting to the NRC is not practicable, report directly to the Coast Guard or EPA predesignated OSC for the geographic area in which the discharge occurs. If the NRC or OSC cannot be notified immediately, contact the nearest Coast Guard unit. State or territorial reporting requirements may apply as well.

(3) For OCONUS Marine Corps activities, international oil pollution laws require that marine oil spills that impact, or may impact, the waters or shoreline of any coastal nation must be reported immediately to proper authorities in that nation.

b. Release Notification under CERCLA

(1) EPA regulations in section 6 of reference (aq) specify the notification requirements for CERCLA HS releases. Immediately report all RQ HS releases from a vessel, offshore facility, or onshore facility to the NRC at Coast Guard Headquarters at (800) 424-8802 or (202) 267-2675 by voice communication.

(2) EPA regulations in section 4 and 5 of reference (aq) specify the HS designated under reference (e) and their RQs, respectively.

c. Emergency Release Notification under RCRA

(1) As required in section 56(a) of reference (x), the RCRA FEC must notify appropriate state or local emergency agencies if their assistance is needed in the event of an imminent or actual emergency.

(2) If the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, section 56(d)(1) in reference (x) requires the emergency coordinator to notify appropriate local authorities if an evacuation of the local area may be advisable. Additionally, the emergency coordinator must notify the CG/CO, as the Federal OSC for Marine Corps HS releases. Section 56(d)(2) of reference (x) provides requirements for notifying the NRC of the release.

(3) Section 56(h)(2)(i) in reference (x) requires the facility to provide a written report to the EPA Regional Administrator within 15 days of the release.

d. Release Notification under the CAA

(1) Reference (w) does not contain specific release notification requirements for accidental releases of HCs. However, section 95(a)(1)(i) of reference (w), requires the emergency response plan to include notification procedures for informing the public and emergency response agencies about such releases.

(2) EPA regulations in section 130 of reference (w) specify the list of CAA-regulated substances and thresholds for accidental release prevention.

e. Emergency Release Notification under EPCRA

(1) As required in section 40 of reference (aj), Marine Corps-owned and operated facilities that release a RQ of any EHS or CERCLA HS must immediately notify the local community emergency coordinator for the LEPC of any area likely to be affected by the release and the SERC of any state likely to be affected. A written follow-up emergency notice is required as soon as practicable after the release. Commanders whose units release a RQ of any EHS or CERCLA HS at a location other than a DOD-owned and operated facility must immediately notify the local community emergency coordinator for the LEPC of any area likely to be affected by the release and the SERC of any state likely to be affected.

(2) Section 40(b)(2) in reference (aj) identifies specific required elements to be included in the notice.

(3) Appendix A of reference (aj) specifies the RQs of EPCRA EHSs.

f. UST Releases. For UST releases, refer to chapter 18 of this Manual.

10. Response Requirements

a. Responsible Party. The party responsible for the release must take all necessary actions to contain and recover the release, if possible, and to mitigate natural resource damages. The responsible party is responsible financially for all response and restoration costs, whether incurred by it or another party. If a local government entity responds to an HS release aboard a Marine Corps installation, reference (ar) specifies procedures for reimbursing the local government for its expenses in connection with the response. Figure 7-6 displays the response process provided in reference (r).

b. ICS. As required by reference (d), the Marine Corps will use the ICS to facilitate coordination with its own, contractor, and regulatory personnel and the public during a spill event. Figure 7-7 displays the structure of the ICS.

c. Oil Discharges

(1) The Marine Corps must respond to the discharge and coordinate response efforts with the Federal OSC. EPA is the predesignated Federal OSC in the inland zone, and the Coast Guard is the Federal OSC in the coastal

zone. The Federal OSC will monitor the response efforts of the Marine Corps and, if necessary, will advise the Marine Corps of appropriate actions. The Federal OSC may direct or take charge of response efforts if the Marine Corps response is determined to be inadequate. Subpart D of reference (r) outlines the operational response phases for oil removal. These phases are as follows:

- (a) Discovery or notification.
- (b) Preliminary assessment and initiation of action.
- (c) Containment, countermeasures, cleanup, and disposal.
- (d) Documentation and cost recovery.

(2) The response should be conducted in accordance with the oil FRP. The primary response asset available to the CG/CO is the activity's oil OSOT.

d. HS Releases

(1) References (c), (d), and (e) require the Marine Corps, as the responsible party, to contain, mitigate, and remove the release. As the Federal OSC for its HS releases, the Marine Corps CG/CO, through the OSCDR, directs the Federal response effort, including coordination with concerned Federal, state, and local authorities. Subpart E of reference (r) outlines the procedures for HS response. These procedures include discovery or notification, removal site evaluation, and removal actions. The response should be conducted in accordance with the appropriate response plan. As with oil spills, the primary response asset available to the CG/CO is the activity's HS OSOT.

(2) Reference (f), section 56(e)-(h) of reference (x) specifies response requirements to imminent or actual emergency situations.

(3) Reference (g), section 95 in reference (w) contains the requirements for emergency response to releases of listed chemicals.

(4) Reference (a), section 40 of reference (aj) contains requirements for emergency release notification of HCs and RQ EHSs.

11. Non-DOD Release Response

a. Local Releases

(1) Local non-DOD OHS releases can require responses by Marine Corps personnel and equipment. Some releases can originate off the installation and threaten to migrate onto it. Other releases may originate from a commercial pipeline, tank car on a railroad, or tank truck on a highway which directly crosses Marine Corps property through an easement. In any of these cases, Marine Corps assets may be the closest responders.

(2) The installation CG/CO represents the SECDEF as the trustee for natural resources located aboard the installation. In this role, the CG/CO

may need to activate installation response assets or simply monitor the response being conducted by the responsible party. Paragraph 7104.12 below outlines procedures for assessing the damages to natural resources resulting from OHS releases.

b. Assistance to Federal OSC. Section 175(b)(4) of reference (r) specifies DOD's responsibilities for responding to non-DOD releases when requested by the Federal OSC. As a participating NRT member, the DOD and its component services must provide any assistance requested by the Federal OSC in responding to OHS releases.

## 12. Marine Corps Natural Resource Trustee Responsibilities

a. Trusteeship. Section 600 of reference (r) assigns responsibilities to Federal officials for the protection of natural resources that are held in trust by the Federal Government for the public. The SECDEF is responsible for natural resources located on, over, or under land administered by the DOD. Consequently, the installation commander is responsible for protecting natural resources aboard Marine Corps installations from any environmental damage, including OHS releases.

### b. Natural Resource Damage Assessment (NRDA)

(1) As a trustee of Federal natural resources, the Marine Corps must assess the amount of damage suffered due to OHS spills using the appropriate NRDA procedures. Installation commanders and their staffs must use these procedures to determine the extent of injuries to the environment, determine the value of natural resources loss, develop a restoration plan, select a preferred alternative, and present the plan to the responsible party for implementation or to fund the trustee's costs of implementing the plan. Following the procedures will provide the installation with a defensible plan and a rebuttable presumption should the responsible party decline to settle a claim and litigation becomes necessary to recover monetary damages. Damages may be recovered for those natural resource injuries and losses that are not fully remediated by response actions. All money recovered in compensation for natural resource injuries must be used to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources. Trustee officials may also recover the reasonable costs of assessing natural resource damages and any prejudgment interest.

(2) In reference (as), DOI published the required procedures under reference (e) for assessing natural resource damages resulting from a discharge of oil or a HS release. Two types of NRDA have been developed by DOI. The type A assessment involves standard procedures for a simplified assessment requiring minimal field observations. The type B assessment involves site-specific procedures for detailed assessments in individual cases. Under both NRDA types, assessments consist of the following four phases:

(a) Phase I: Preassessment Screen. This phase involves the activities that precede the actual assessment. Trustee officials, once notified of a discharge or release, perform a preassessment screening to ascertain whether further assessment actions are warranted. Subpart B of

reference (as) describes this phase.

(b) Phase II: Assessment Plan. This phase involves the preparation of an Assessment Plan, which is subject to public review and comment. The Assessment Plan assists the involvement of potentially responsible parties, other trustee officials, the general public, and other interested parties. Subpart C of reference (as) describes the procedures used to develop an Assessment Plan.

(c) Phase III: Assessment Implementation. Trustee officials conduct the work described in the Assessment Plan. The work involves three steps: injury determination, quantification, and damage determination. Subparts D and E of reference (as) describe the procedures for conducting type A and type B assessments.

(d) Phase IV: Post Assessment. Whether a type A or type B assessment, this phase consists of post-assessment activities such as preparation of a report of assessment, establishment of an account for damage assessment awards, and development of a restoration plan for use of the awards. Subpart F of reference (as) describes the procedures used for this phase.

(3) In reference (at), NOAA published required procedures for assessing natural resource damages resulting from a discharge of oil or an HS release to navigable waters under reference (d) and (c). These regulations discuss the meaning of a rebuttable presumption, coordination procedures, considerations for facility restoration, legal authorities and relationships with references (e) and (r), complying with reference (au) and its implementing regulations, settlement procedures, and provisions for emergency restoration. Unlike DOI four-phase NRDA procedures, the NOAA NRDA has the following three phases:

(a) Preassessment Phase. This phase requires the trustee officials to determine whether natural resources or services have been injured by the discharge or release. If response actions are not expected to eliminate the threat of ongoing injury, and feasible restoration alternatives exist, trustees should proceed with the assessment. Subpart D of reference (at) outlines jurisdiction, the determination to conduct restoration planning, data collection procedures, filing a Notice of Intent (NOI) to conduct restoration planning, and maintaining an Administrative Record. Administrative Records are maintained per reference (ag), SSIC 5090.4.

(b) Restoration Planning Phase. This phase evaluates potential injuries to natural resources and services and uses that information to determine the need for, and scale of, restoration actions. Subpart E of reference (at) describes injury assessment determination and quantification, developing and evaluating restoration alternatives, selecting a preferred alternative, and developing a restoration plan or participating in a regional restoration plan.

(c) Restoration Implementation Phase. Subpart F of reference (at) outlines closing the Administrative Record for restoration planning, presenting a written demand for damages to the responsible party, resolving

unsatisfied demands, and opening an account for recovered damages.

(4) If a discharge or release of a mixture of oil and HS injures natural resources and/or services, trustees must use reference (as) regulations to obtain a rebuttable presumption.

(5) Trustees may request assistance for conducting a NRDA from the local USFWS representative and the NOAA regional scientific support coordinator.

7105. TERMS AND DEFINITIONS

1. Aboveground Release. Any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system (reference (av)).

2. Adverse Weather. The weather conditions considered by the facility operator in identifying the response systems and equipment to be deployed in accordance with a response plan, including significant wave height, icy conditions, temperature ranges, weather-related visibility, and currents within the areas in which those systems or equipment are intended to function (reference (u)).

3. Analysis of Off-Site Consequences. A qualitative or quantitative analysis of a range of accidental releases, including worst case releases, to determine off-site effects including potential exposures of affected populations.

4. Below-Ground Release. Any release to the subsurface of the land and to groundwater. This includes, but is not limited to, releases from the below-ground portions of an UST system and below-ground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system (reference (av)).

5. Coastal Zone. All United States waters subject to the tide, United States waters of the Great Lakes; specified ports and harbors on inland rivers; waters of the contiguous zone; other waters of the high seas subject to reference (r); and the land surface or land substrate, groundwaters, and ambient air proximal to those waters (reference (r)).

6. Complex. A facility possessing a combination of transportation-related and nontransportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of reference (c) (reference (s)).

7. Contiguous Zone. The zone established by the United States under Article 24 of the Convention on the Territorial Sea and Contiguous Zone, that is contiguous to the territorial sea and that extends nine miles seaward from the outer limit of the territorial area (reference (s)).

8. Contract or Other Approved Means

a. Written contract or other legally binding agreement between the operator and a response contractor or other spill response organization identifying and ensuring the availability of the specified personnel and equipment within stipulated response times for a specified geographic area.

b. Certification that specified equipment is owned or operated by the pipeline operator, and that operator personnel and equipment are available within stipulated response times for a specified geographic area.

c. Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment to be available within stipulated response times for a specified geographic area (reference (u)) (a similar definition for facilities is provided in reference (s)).

9. Discharge. Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes the following:

a. Discharges in compliance with a permit under section 402 of reference (c).

b. Discharges resulting from circumstances identified, reviewed, and included as part of the public record with respect to a permit issued or modified under section 402 of reference (c) and subject to a condition in such permit.

c. Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of reference (c), that are caused by events occurring within the scope of relevant operating or treatment systems (reference (s)).

d. For purposes of reference (r), discharge also means threat of discharge.

10. Dispersant. Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column (reference (r)).

11. EHS. Any substance listed in appendix A or B of reference (aj).

12. Facility. All buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and are owned or operated by the same person (or by any person who controls, is controlled by, or under common control with, such person). Includes man-made structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft (reference (aj)).

13. Fish and Wildlife and Sensitive Environments. Areas that may be identified by either their legal designation or by evaluations of Area

Committees (for planning) or members of the Federal OSC spill response structure (during responses). These areas may include wetlands, national and state parks, critical habitats for endangered/threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and state lands that are research national areas, heritage program areas, land trust areas, and historic and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats (reference (s)).

14. Foreign Areas. Any countries, territories, or jurisdictions not contained under United States areas or waters when used in relation to section 311(a)(5) of reference (c) and section 101(27) of reference (e).

15. HC. Any chemical that is a physical or health hazard as defined under section 1200(c) of reference (z), except that such a term does not include the following substances:

a. Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.

b. Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.

c. Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.

d. Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.

e. Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer (reference (aj)).

16. Harmful Quantity. Any quantity of discharged oil that violates state water quality standards, causes a film or sheen on the water's surface, or leaves sludge or emulsion beneath the surface (reference (am)).

17. HM

a. Any substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated. The term includes HS, HW, marine pollutants, and elevated temperature materials as defined in reference (aw); materials designated as hazardous under the provisions of section 101 in reference (ax); and materials that meet the defining criteria for hazard classes and divisions in

reference (ay) (reference (aw)).

b. Any other hazard-specific guidance (instructions or directives) takes precedence over this instruction for control purposes of HM. Such materials include ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury. These materials should also be considered hazardous and personnel exposure may occur incident to manufacture, storage, use, and demilitarization of these items.

18. HS

a. As defined by section 101(14) of reference (e), an HS is:

(1) Any substance designated pursuant to section 311(b)(2)(A) of reference (c).

(2) An element, compound, mixture, solution, or substance designated pursuant to section 102 of reference (e).

(3) Any HW having the characteristics identified under or listed pursuant to section 3001 of reference (k), but not including any waste the regulation of which under the reference (k) has been suspended by Act of Congress.

(4) Any toxic pollutant listed under section 307(a) of reference (c).

(5) Any HAP listed under section 112 of reference (g).

(6) Any imminently HC substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of reference (m).

(7) The term does not include petroleum, including crude oil or any fraction thereof, that is not otherwise specifically listed or designated as a HS under (1) through (6) above, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas) (reference (r)).

b. As defined by reference (aw), a HS is a material, including its mixtures and solutions, that:

(1) Is listed in appendix A to section 101 in reference (ax).

(2) Is in a quantity, in one package, which equals or exceeds the RQ listed in appendix A to section 101 in reference (ax).

(3) When in a mixture or solution:

(a) For radionuclides, conforms to paragraph 7 of appendix A to section 101 in reference (ax).

(b) For other than radionuclides, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the table provided in section 8 in reference (aw) (reference (aw)).

19. Injury. A measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions resulting from a discharge (reference (s)).

20. Inland Area. The area shoreward of the boundary lines defined in reference (az). In the Gulf of Mexico, it means the area shoreward of the lines of demarcation defined in sections 740- 850 in reference (ba). The inland area does not include the Great Lakes (reference (t)).

21. Inland Zone. The environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers (reference (r)).

22. Maximum Extent Practicable

a. The limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore nontransportation-related facilities in adverse weather (reference (s)).

b. The planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the criteria in this subpart or in a specific plan approved by the cognizant COTP (reference (t)).

c. The limits of available technology and the practical and technical limit on a pipeline operator in planning the response resources required to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a pipeline in adverse weather (reference (u)).

23. Mitigation System. Specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure to the public or environment (reference (w)).

24. NRT. Responsible for national response and preparedness planning, for coordinating regional planning, and for providing policy guidance and support to RRTs in addressing oil discharges and releases of HSS, pollutants, or contaminants. The NRT's membership consists of representatives from 16 Federal agencies including the DOD.

25. Natural Resources. The land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the Exclusive Economic Zone), any state or local government or Indian tribe, or any foreign government

(reference (at)).

26. Navigable Waters. The waters of the United States including the territorial seas. This term includes:

a. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide.

b. All interstate waters, including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairies, potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce, including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes.

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

(3) That are or could be used for industrial purposes by industries in interstate commerce.

d. All impoundments of waters otherwise defined as waters of the United States under this paragraph.

e. Tributaries of waters identified above in (a) through (d).

f. The territorial sea.

g. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified above in (a) through (d).

h. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of reference (c) (other than cooling ponds which also meet the criteria of this definition) are not waters of the United States. Navigable waters do not include prior converted cropland (reference (s)).

27. Off Site. Areas beyond the property boundary of the stationary source, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours (reference (w)).

28. Oil. Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, vegetable oil, animal oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil (reference (u)).

29. Oil Spill Removal Organization. An entity that provides response resources (reference (u)).

30. OSC. The single Federal representative designated pursuant to reference (r) and identified in approved Regional Oil and Hazardous Substances Pollution Contingency Plans (reference (bb)).

31. Onshore Facility. Any facility of any kind located in, on, or under any land within the United States, other than submerged land (reference (s)).

32. Qualified Individual. An English-speaking representative of an owner/operator, located in the United States, available on a 24-hour basis, with full authority to activate and contract with required oil spill removal organization(s), activate personnel and equipment maintained by the operator, act as a liaison with the OSC, and obligate any funds required to carry out all required or directed oil response activities (reference (u)).

33. Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any HC, EHS, or CERCLA HS (reference (aj)).

34. Remove or Removal. The removal of oil from the water and shorelines or the taking of such other actions the Federal OSC may determine to be necessary to minimize or mitigate damage to the public health or welfare, including but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches (reference (bb)).

35. RQ

a. Quantities that may be harmful as set forth in section 3 of reference (an), the discharge of which is a violation of section 311(b)(3) of reference (c), and requires notice as set forth in section 21 of reference (an) (reference (an)).

b. That quantity, as set forth in reference (aq), the release of which requires notification pursuant to reference (aq).

c. For any CERCLA HS, the RQ established in table 302.4 of reference (aq), for such substance. For any other substance, the RQ is 1 pound (reference (aj)).

d. The quantity specified in column 2 of the appendix to section 101 in reference (ax) for any material identified in column 1 of that appendix (reference (aw)).

36. Response Activities. The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or actions taken to minimize or mitigate damage to the environment (reference (u)).

37. Responsible Party

a. In the demise of a vessel, any person owning, operating, or chartering the vessel.

b. In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a Federal agency, state, municipality, commission, or political subdivision of a state, or any interstate body, that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.

c. In the case of a pipeline, any person owning or operating the pipeline (reference (at)).

38. Restoration. Any action (or alternative), or combination of actions (or alternatives), to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources and services (reference (at)).

39. Sheen. An iridescent appearance on the surface of water (reference (am)).

40. Significant Accidental Release. Any accidental release of a regulated substance that has caused or has the potential to cause off-site consequences such as death, injury, or adverse effects to human health or the environment or to cause the public to seek shelter or be evacuated to avoid such consequences.

41. Spill Event. A discharge of oil into or upon the navigable waters of the United States, or adjoining shorelines in harmful quantities, as defined in reference (am).

42. Spill Management Team. The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

43. Territorial Seas. The belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles (reference (ao)).

44. TPQ. The established amount of an EHS, which when present on site at a facility in excess of the threshold limit, requires reporting under reference (a) sections, 302, 311, and 312. TPQs are listed in appendices A and B of reference (aj).

45. United States. The states, the District of Columbia, Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands (reference (am)).

46. Value. The maximum amount of goods, services, or money an individual is willing to give up to obtain a specific good or service, or the minimum amount of goods, services, or money an individual is willing to accept to forgo a specific good or service (reference (at)).

47. Vessel. Every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel (reference (s)).

48. Worst Case Discharge. The largest foreseeable discharge of oil, including a discharge from fire or explosion, in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is calculated according to section 105 of reference (u) (reference (u)).

49. Worst Case Release. The release of the largest quantity of a regulated substance from a vessel or process line failure that leads results in the greatest distance to an endpoint defined in section 22(a) of reference (w) (reference (w)).

CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

SECTION 2: MARINE CORPS POLICY

7200. MARINE CORPS ORGANIZATION FOR PLANNING AND RESPONSE

1. The Marine Corps must plan and prepare fully for oil discharges and HS releases, and when such incidents occur, must undertake immediate, direct action to contain and remove the spill while minimizing any harmful effects to the environment. If appropriate, the Marine Corps will coordinate its response efforts with other DOD commands.
2. Commanders whose activities are subject to the regulations discussed in section 1 of this chapter must establish emergency planning and response policies consistent with this Manual.
3. The installation CG/CO must act as the Federal OSC for HS releases originating on, or from, their installations to include the movement of an HS from the installation until it reaches its destination.
4. Marine Corps installations where OHS spill risks exist must fully train and equip OSOTs to control, contain, and clean up OHS spills. These teams can be supplemented by OHS pollution response contracts or arrangements to access such contracts with trained, ready response contractors who can rapidly respond to spills which are beyond the capability of the OSOTs. All such contracts must be coordinated with the OSC.

7201. RELEASE NOTIFICATION TO THE CMC (LF)

1. In addition to notifying the NRC, SERC, LEPC, and other appropriate agencies, all harmful quantity oil spills and RQ HS releases occurring within the CONUS and OCONUS must be reported to the CMC (LF) as discussed below.
2. For releases that result in serious environmental harm or that may generate adverse publicity, notify the CMC (LF) within 24 hours of the release by telephone at DSN 426-2138 or commercial 703-695-8302.
3. For less serious releases, and to provide more detailed information on serious releases, notify the CMC (LF) via the appropriate chain of command by message within three working days using the format in appendix I of this Manual for harmful quantity oil discharges and RQ HS releases. Use a routine precedence for less serious releases; use a priority precedence for serious releases. Installations may also report via email to the appropriate POC at CMC (LF) using the appendix I format.
4. For releases involving Marine Corps commands that are tenants of another service or agency or under the operational command of another service (e.g., Commander, Naval Base Norfolk), report the release to the host installation environmental office. All Marine Corps commands/units and tenants and non-Marine Corps tenants on Marine Corps property, even if under the operational command of another service, should report the release to the installation

environmental office. This includes oil spills as described by reference (ap) for fueling operations.

7202. CONTINGENCY PLANNING

1. Marine Corps installations, including overseas activities, must prepare appropriate contingency plans providing geographic coverage for regulated Marine Corps-owned and -leased land or activities, including outlying or remote airfields, Reserve units, or mobile detachments.

2. Marine Corps installations may use a single contingency plan to meet all the diverse planning requirements but only if the plan meets the NRT ICP Guidance.

3. To meet Federal OSC contingency planning requirements, installation plans must identify and prepare for responding to "most probable" incidents and "worst case" discharges; identify Marine Corps, Navy, Federal, and commercial regional response assets; and be coordinated with other applicable Federal OSC plans. To meet state, local, and DOD planning requirements, these plans also must be tailored to the specific functions and risks of the installation.

4. Marine Corps tactical units that transport oil in bulk packaging or operate mobile facilities must provide a copy of the RSPA-required response plan or EPA-required SPCC plan, as appropriate, to the host installation's environmental office. Units deployed to another installation for training must provide a copy of the plan to that installation's environmental office upon arrival.

7203. RESPONSE OPERATIONS

1. Safety is the top priority for all Marine Corps response operations, both CONUS and OCONUS. The safety and health of response personnel should not be compromised at any point during on-scene response. All emergency response personnel should be trained per the requirements in sections 120, 38 and 146(k) of reference (z).

2. Each installation will conduct response exercises per the applicable regulations and each response plan's requirements. Following the exercise, if necessary, the plan should be revised to incorporate improvements.

3. The Marine Corps must respond promptly to all Marine Corps OHS releases. For Marine Corps HS releases under reference (e), the Marine Corps, as the predesignated Federal OSC, directs all required cleanup actions. For Marine Corps oil discharges under reference (c), either EPA (inland zone) or Coast Guard (coastal zone) is the predesignated Federal OSC and has statutory authority to assume control of the response if the OSC determines that Marine Corps actions are ineffective or inadequate. Marine Corps policy is to retain control of all Marine Corps OHS pollution responsibilities. This policy is consistent with provisions in reference (r) that define Federal agency response requirements. For HS releases under (f), the (g), or reference (a), the response will be consistent with applicable regulations and the appropriate response plan.

4. Under the terms and conditions of reference (r), the Federal OSC may request Marine Corps response assistance for non-Marine Corps spills. If the Federal OSC seeks Marine Corps assistance, this request will come to the Marine Corps through the DOD representative to the NRT or the RRT. The Marine Corps must respond to these requests to the extent that such response does not compromise essential mission requirements. Marine Corps resources also may respond to OHS releases in adjacent communities under the terms of mutual aid agreements.

7204. EPCRA. Marine Corps policy is to comply with all requirements of reference (a) as required by reference (p). Marine Corps facilities should comply with state EPCRA program requirements to the extent that resources allow, provided that such compliance does not interfere with command mission accomplishment or other legal obligations. The following procedures must be used by all Marine Corps installations in the customs territory of the United States:

1. All facilities must define the facility fenceline and the primary mission of the facility in support of EPCRA requirements. ISSAs must be updated to reflect the data collection requirements of the tenants to the host.

a. The facility fenceline is most appropriately defined by class I property lines with the fenceline owner responsible for all DOD tenants. The fenceline owner, otherwise known as the "host" command, must file one report for the entire facility for each section of reference (a) requiring a report. Marine Corps facilities are not responsible for reporting actions of non-DOD Federal agencies.

b. The primary mission should be a broad vision of the overall requirements of the installation and should be consistent with the Installation Master Plan.

2. All facilities must determine whether they meet or exceed threshold requirements for an EHS or HS used at the facility. Each Marine Corps facility that exceeds a threshold is subject to the reporting requirements of reference (a) for emergency planning, providing of information, and emergency notification. Host commands must ensure that thresholds are calculated using the entire facility inventory.

a. Each facility that exceeds a TPQ for an EHS must notify the SERC and the LEPC and provide a facility point of contact, telephone number, and an alternate POC.

b. Each covered facility must request to participate in local emergency planning functions and must appoint a facility representative to actively serve on the LEPC. As much as possible, each covered facility must provide any emergency planning information requested by the LEPC, while taking into consideration national security issues.

c. Each facility that releases an EHS or HS in excess of the RQ for that substance (into any environmental media) must:

(1) Immediately provide verbal notification to all LEPCs and SERCs in

the area(s) likely to be affected.

(2) Submit a written follow-up notification of the release and actions taken as soon as practicable after the release.

(3) Prepare a standard facility form with approval chain identified to expedite the notification of covered releases.

(4) Notify the activity's higher headquarters in message form as soon as possible after the release has occurred.

d. Releases that result in exposure to personnel solely within the boundaries of the facility do not require notification to the LEPC or SERC, regardless of whether the RQ for that substance was exceeded.

3. All facilities must determine whether they meet or exceed threshold requirements for all HCs they possess that require a MSDS. Each Marine Corps facility that exceeds the threshold is subject to the reporting requirements of reference (a) for community right-to-know provisions. Host commands must ensure that thresholds are calculated using the entire facility inventory.

a. In general, if the quantity of an HC is present in amounts equal to or greater than 10,000 pounds, it is reportable; if the substance is an EHS, and the amount present is equal to or greater than 500 pounds (or 55 gal) or its TPQ, whichever is less, it is also reportable. For each reportable HC, facilities must provide a one-time submission of a copy of the MSDS or a list of reportable HCs, grouped by hazard category, to the LEPC, SERC, and the fire department with jurisdiction over the facility. A hard copy MSDS obtained from the Hazardous Material Information System is sufficient. The MSDS must be submitted to the fire department that would routinely be the first alerted during an emergency. While this generally would be the fire department located on the installation, it may be a fire department separate from the facility.

b. If a list is submitted, it must contain the following information:

(1) A list of the HCs for which an MSDS is required under OSHA regulations, grouped by hazard category. That list need only include those chemicals (either in mixtures or in the pure form) that meet or exceed threshold levels.

(2) The HC listed under all applicable hazard categories.

(3) The chemical and common name of each HC as provided on the MSDS.

(4) Amendments to this submission must be made within a three-month period after significant new information is received.

4. Facilities meeting or exceeding HC threshold requirements must annually submit Emergency and Hazardous Chemical Inventory Forms for those HCs to the LEPC, SERC, and the fire department with jurisdiction over the facility by March 1 covering the previous calendar year's inventory.

a. Facilities may submit either Tier I or Tier II information; however, they are not required to comply with requests to use any form other than the Federal Tier I or Tier II forms.

b. The SERC and the LEPC have the authority to request a Tier II submission for HCs present at the facility below threshold levels if the requester provides a written statement of need.

5. All facilities must determine whether they have exceeded any of the reporting thresholds for toxic chemicals used each calendar year. Each Marine Corps facility that exceeds the threshold is required to complete the Toxic Chemical Release Reporting Form R. Host commands must ensure that thresholds are calculated using the entire facility inventory.

6. Prior to the release of any reports, installations must review the information to prevent the release of classified information. In cases where information regarding the use of a substance is classified, the activity must develop alternative procedures for protecting activity and off-site personnel.

7205. PROCUREMENT OF OIL SPILL RESPONSE EQUIPMENT USING ENVIRONMENTAL FUNDING

1. In recent years, Marine Corps installations have received support from the NAVFAC Engineering Support Center through the NAVFAC OSRP. Support under this program for Marine Corps installations ceases as of 1 October 2012 (FY12).

2. Installations that received this specific type of NAVFAC support in the past should review the following:

(a) Until the end of FY12, the NAVFAC OSRP office will continue to support the impacted installations with equipment surveys, equipment procurements and coordination efforts related to FRT.

(b) During this transition period, spill response equipment procured by NAVFAC for these installations will be limited to oil spill containment boom and other related support equipment. Major equipment items (such as oil spill response boats and vacuum trucks) will be replaced as needed (as determined by the NAVFAC OSRP) and as program funding allows.

(c) Impacted installations should ensure that any oil spill response requirements for FY13 and beyond have been properly programmed within the Marine Corps environmental program database tool. These requirements should be coded in the database as follows: Pillar as "CMP," Media/Law/Reg as "OPA90," Phase as "EQUIP."

(d) Spill equipment asset inventories and surveys that will be needed after FY12 will be addressed in future correspondence.

3. The 3- and 5-day FRT compliance courses that are provided through the NAVFAC OSRP contract vehicle are centrally funded by Headquarters, Marine Corps and shall continue uninterrupted beyond FY12.

CHAPTER 7

EMERGENCY PLANNING AND RESPONSE

SECTION 3: RESPONSIBILITIES

7300. CMC (LF)/COMMANDER MCICOM

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to emergency planning and response and by uniformly applying Marine Corps policy as set forth in this Manual.
2. Advise installation commanders on preparing required plans and conducting response exercises.
3. Include requests for resources to meet emergency planning and response requirements in the Program Objectives Memorandum/budget submissions.
4. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
5. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local agencies with regard to emergency planning and response.

7301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Identify and submit, to the CMC (LF), project documentation and funding requests for emergency planning and response activities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with emergency planning and response requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all emergency planning and response projects.
3. Ensure that a base or station order or an ECPSOP document is written implementing this chapter. This requirement can be accomplished either by writing an ECPSOP to implement all of the requirements from this Manual or by writing a separate base order to implement this chapter alone.
4. Oversee response efforts for Marine Corps OHS releases within preassigned areas and support other Marine Corps and DOD installation response efforts, as necessary.
  - a. Serve as the Federal OSC under reference (r) for Marine Corps HS releases and, as such, direct the total response effort to the incident.

b. Initiate and direct response operations for Marine Corps oil spills unless officially relieved by the Coast Guard or the EPA Federal OSC.

c. Coordinate response operations with adjacent commands and communities for OHS releases that may impact more than one installation or activity or the surrounding community. Coordinate response operations with RRT DOD representatives.

5. Notify all required Federal, state, and local agencies of Marine Corps OHS releases and make Marine Corps chain-of-command notifications up to the CMC (LF).

6. Identify and program sufficient funds for hiring and training personnel, conducting exercises and drills, providing, operating, maintaining response equipment, and constructing facilities required for implementing the installation's ERPs.

7. Develop, review, and update ERPs using standard formats consistent with regulatory requirements.

a. Ensure that SPCC plans are up-to-date, reviewed at least every five years, and recertified by a PE if structural changes affecting its potential to discharge were made to the facility.

b. Coordinate ERPs with appropriate Federal OSCs and state and local environmental and emergency planning authorities.

c. Develop OHSSCPs and, within the United States, coordinate the development of the plans with overlapping ACPs, as prescribed in reference (r).

d. Annually review and certify that OHS spill contingency plans are current.

8. Ensure that the installation and tenant activities meet applicable EPA and state requirements related to the prevention of oil spills.

9. Retain responsibility for OHS in transit until the OHS has been accepted for disposition at its destination.

10. Establish, train, and exercise OSOTs, spill management teams, and other response personnel for OHS responses.

11. Ensure that Installation Natural Disaster Plans incorporate the requirement for each unit to gather an inventory of HM and HW as part of the preparation process. The inventories will provide a commander with an accurate list of items to be accounted for should a natural disaster remove them from their storage or accumulation points.

12. Comply with reference (a) sections 302-312 reporting requirements as described in paragraph 7104.7 and:

a. Define the facility fenceline, including all tenants, and the

primary mission of the facility to support EPCRA reporting requirements. Revise and update ISSAs to support these requirements.

b. Ensure that all thresholds are calculated using the entire facility inventory and that all reporting requirements for that facility under reference (a) are met.

c. Ensure that all publicly available data have been reviewed to prevent sensitive or classified information from being released.

d. Use data provided from EPCRA reporting to revise and maintain the installation P2 Plan.

13. Ensure that coordination occurs as appropriate with the Safety Office and Federal fire departments in matters relating to emergency planning and emergency response actions.

7302. UNIT/TENANT COMMANDERS

1. Assist their installation commander emergency response efforts to the extent resources allow, provided such compliance does not interfere with command mission accomplishment or other legal obligations.

2. Notify all required Federal, state, and local agencies of off-base releases and make Marine Corps chain-of-command notifications up to the CMC (LF).

3. Prepare and implement an SPCC plan for all off-base use of portable, tactical refueling equipment, such as sixcons and collapsible fabric tanks in accordance with paragraph 7104.2b.

REFERENCES

- (a) 42 U.S.C. 11001 et seq.
- (b) Federal Register, Volume 61, page 28642, June 5, 1996
- (c) 33 U.S.C. 1251 et seq.
- (d) Public Law 101-380, 33, U.S.C. 2701 et seq.)
- (e) 42 U.S.C. 9601 et seq.
- (f) 42 U.S.C. 6901 et seq.
- (g) 42 U.S.C. 7401 et seq.
- (h) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (i) Public Law 92-516, 7 U.S.C. 136 et seq.
- (j) 33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.
- (k) Public Law 89-272, "Solid Waste Disposal Act of 1965," October 20, 1965
- (l) 42 U.S.C. 300(f) et seq.
- (m) 15 U.S.C. 2601 et seq.
- (n) Executive Order 12580, "Superfund Implementation," January 23, 1987
- (o) Executive Order 12777, "Implementation of Section 311 of the Federal Water Pollution Control Act of 1972, as amended, and the Oil Pollution Act," October 18, 1991
- (p) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (q) Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007
- (r) 40 CFR 300
- (s) 40 CFR 112
- (t) 33 CFR 154
- (u) 49 CFR 194
- (v) 30 CFR 254
- (w) 40 CFR 68

- (x) 40 CFR 264
- (y) 40 CFR 265
- (z) 29 CFR 1910
- (aa) 40 CFR 109
- (ab) "Joint Services Spill Prevention, Control, and Countermeasure (SPCC) Plan Template," April 2004
- (ac) "Joint Services Spill Prevention, Control, and Countermeasure (SPCC) Plan Frequently Asked Questions," April 2004
- (ad) 49 CFR 130
- (ae) OPNAVINST 5090.1C, Chapter 15
- (af) 40 CFR 58
- (ag) SECNAV M-5210.1
- (ah) 40 CFR 70
- (ai) 40 CFR 71
- (aj) 40 CFR 355
- (ak) 40 CFR 370
- (al) Department of Transportation, "National Preparedness for Response Exercise Program (PREP) Guidelines," August 2002
- (am) 40 CFR 110
- (an) 40 CFR 117
- (ao) 40 CFR 116
- (ap) 33 CFR 153
- (aq) 40 CFR 302
- (ar) 40 CFR 310
- (as) 43 CFR 11
- (at) 15 CFR 990
- (au) 42 U.S.C. 4321
- (av) 40 CFR 280

(aw) 49 CFR 171

(ax) 49 CFR 172

(ay) 49 CFR 173

(az) 46 CFR 7

(ba) 33 CFR 80

(bb) 40 CFR 113

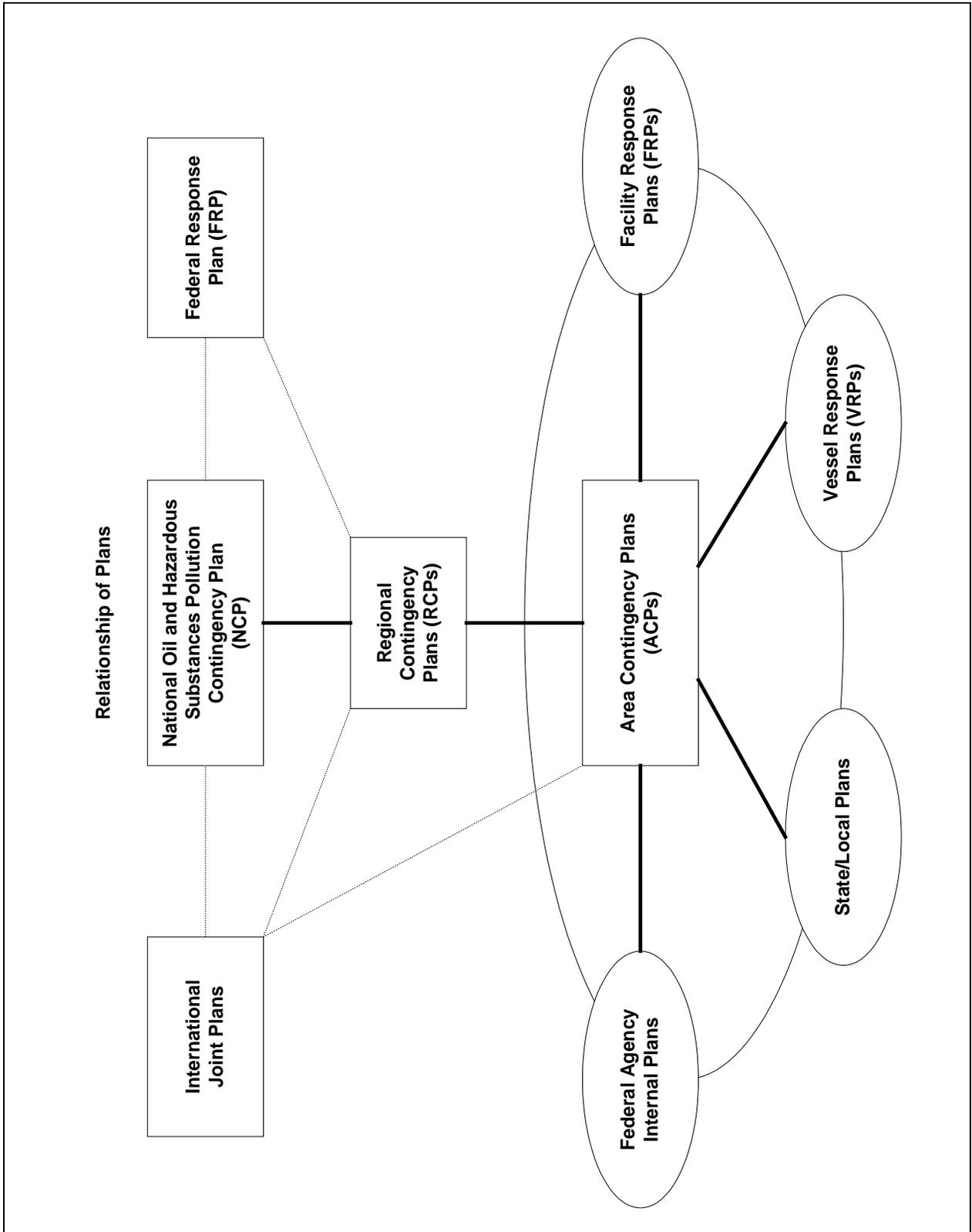


Figure 7-1.--Relationships of Contingency and Response Plans

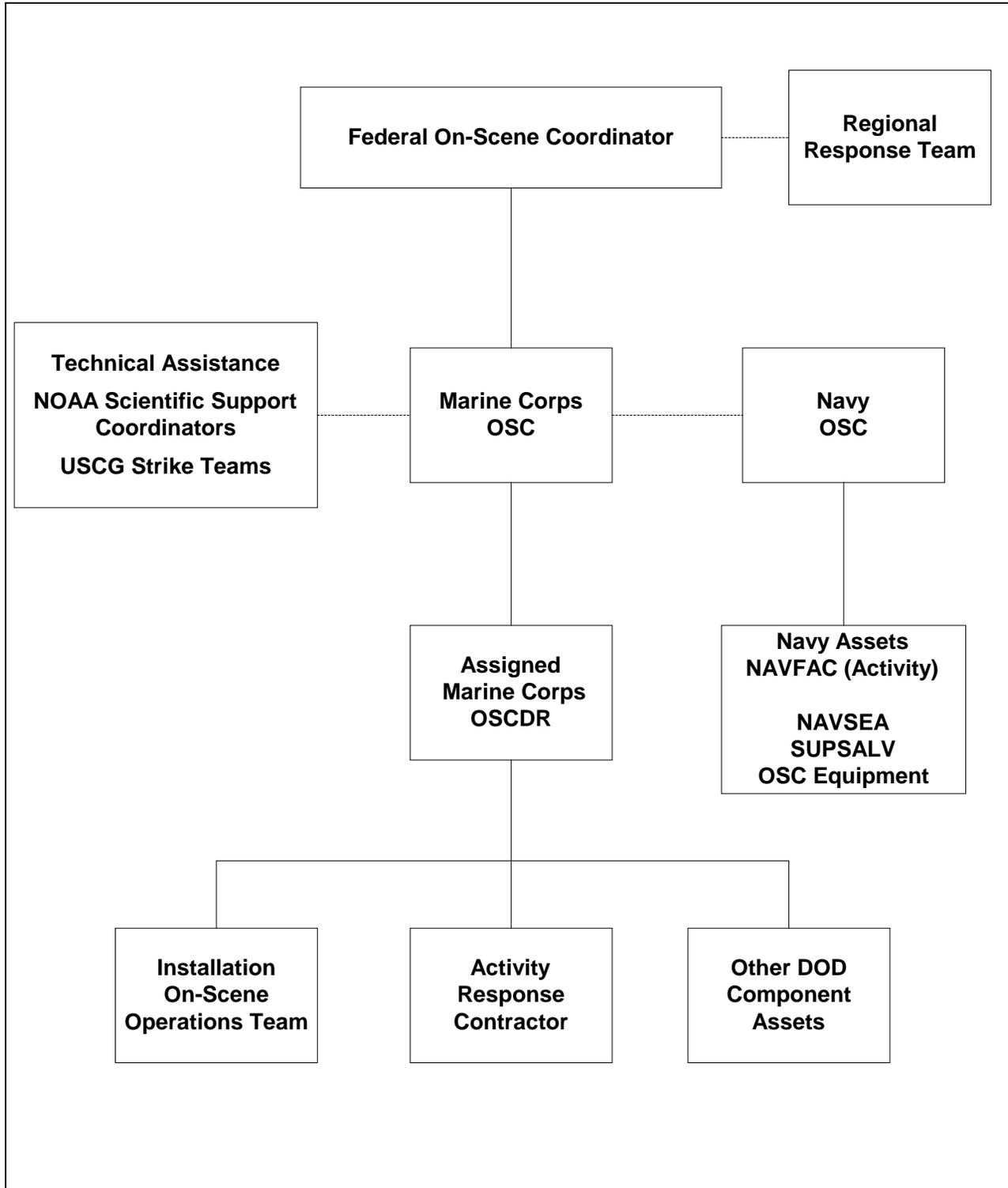


Figure 7-2.--Marine Corps Oil Pollution Response Organization

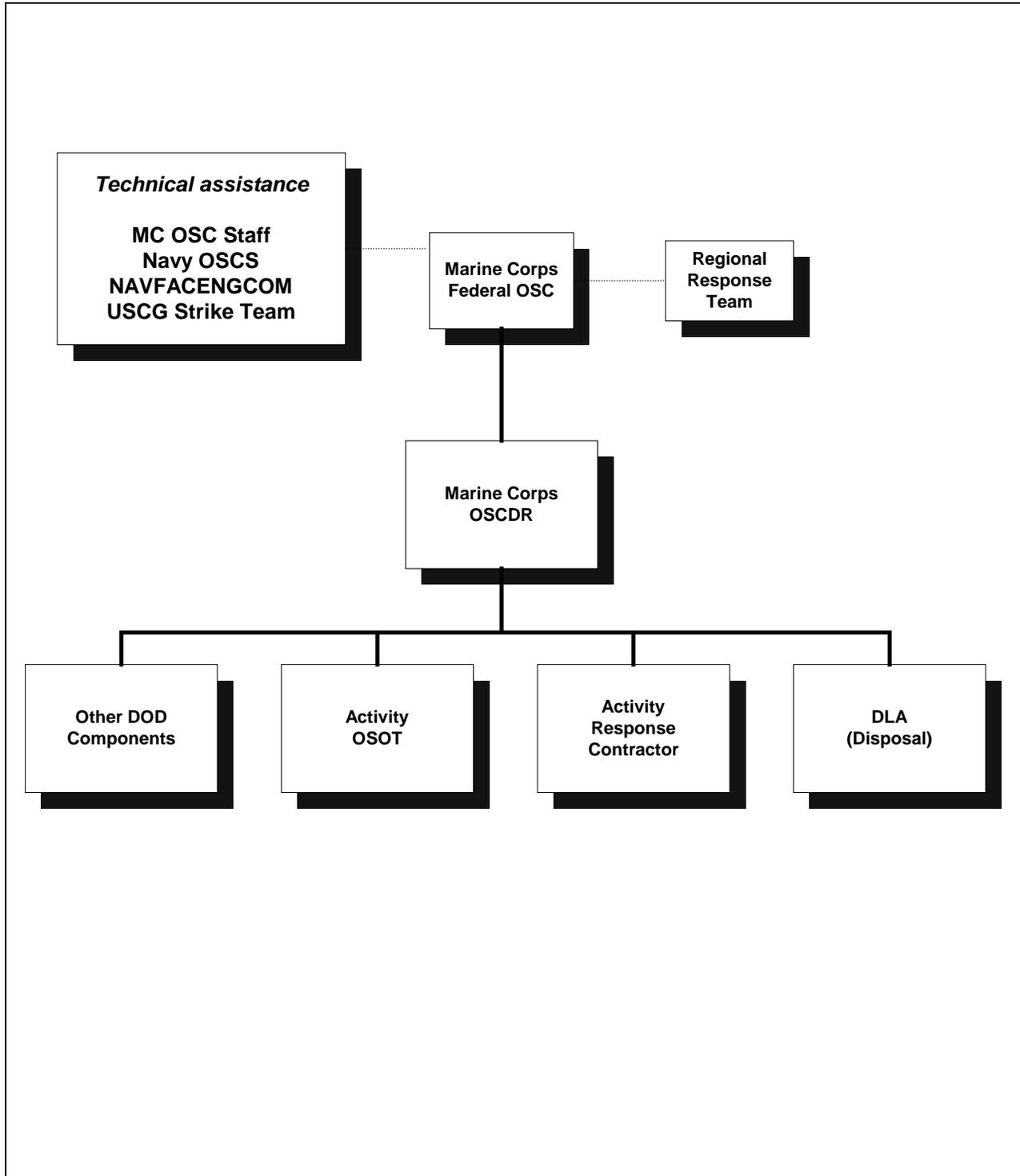


Figure 7-3.--Marine Corps Hazardous Substance Pollution Response Organization

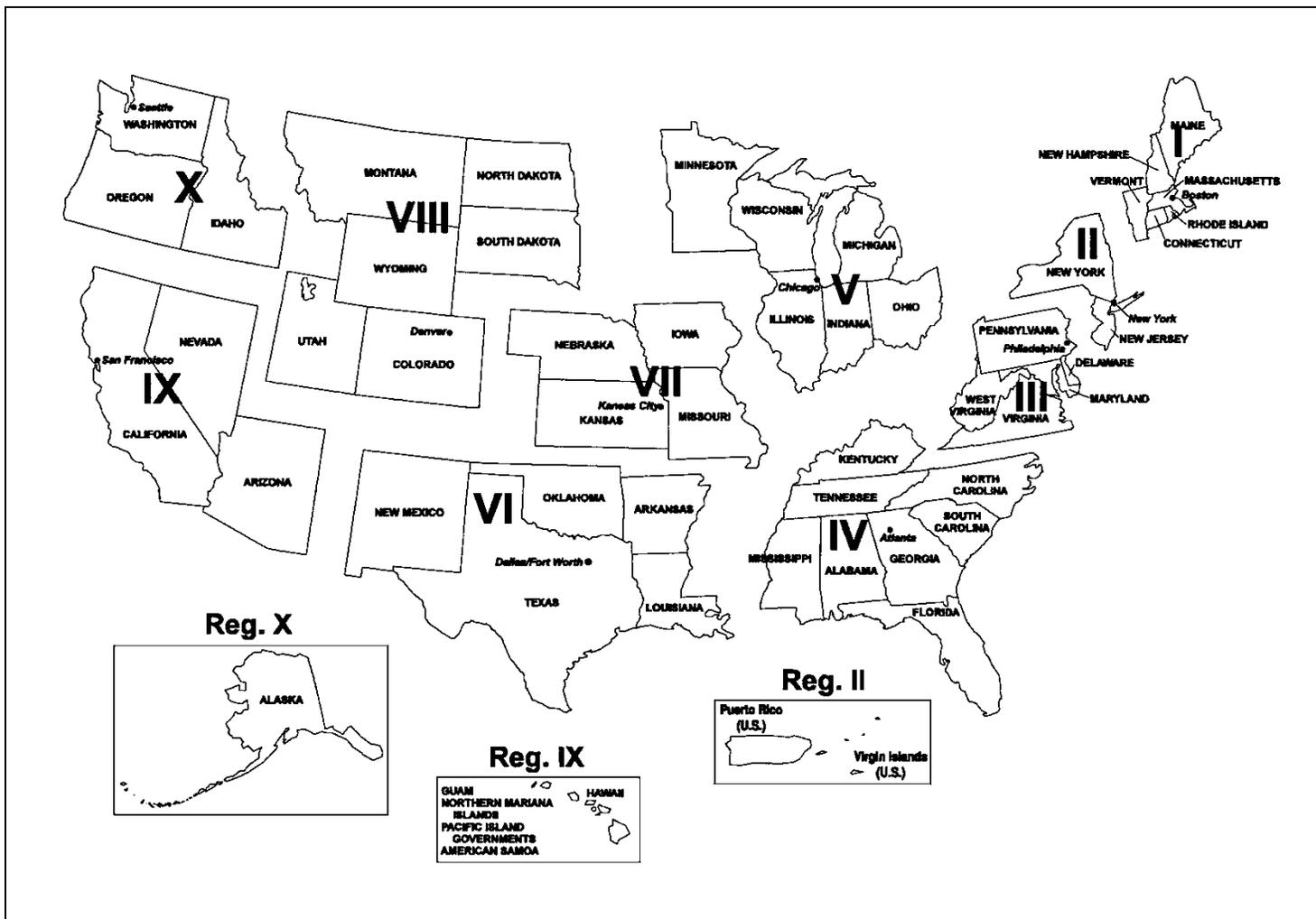


Figure 7-4.--Standard Regional Boundaries of the Environmental Protection Agency

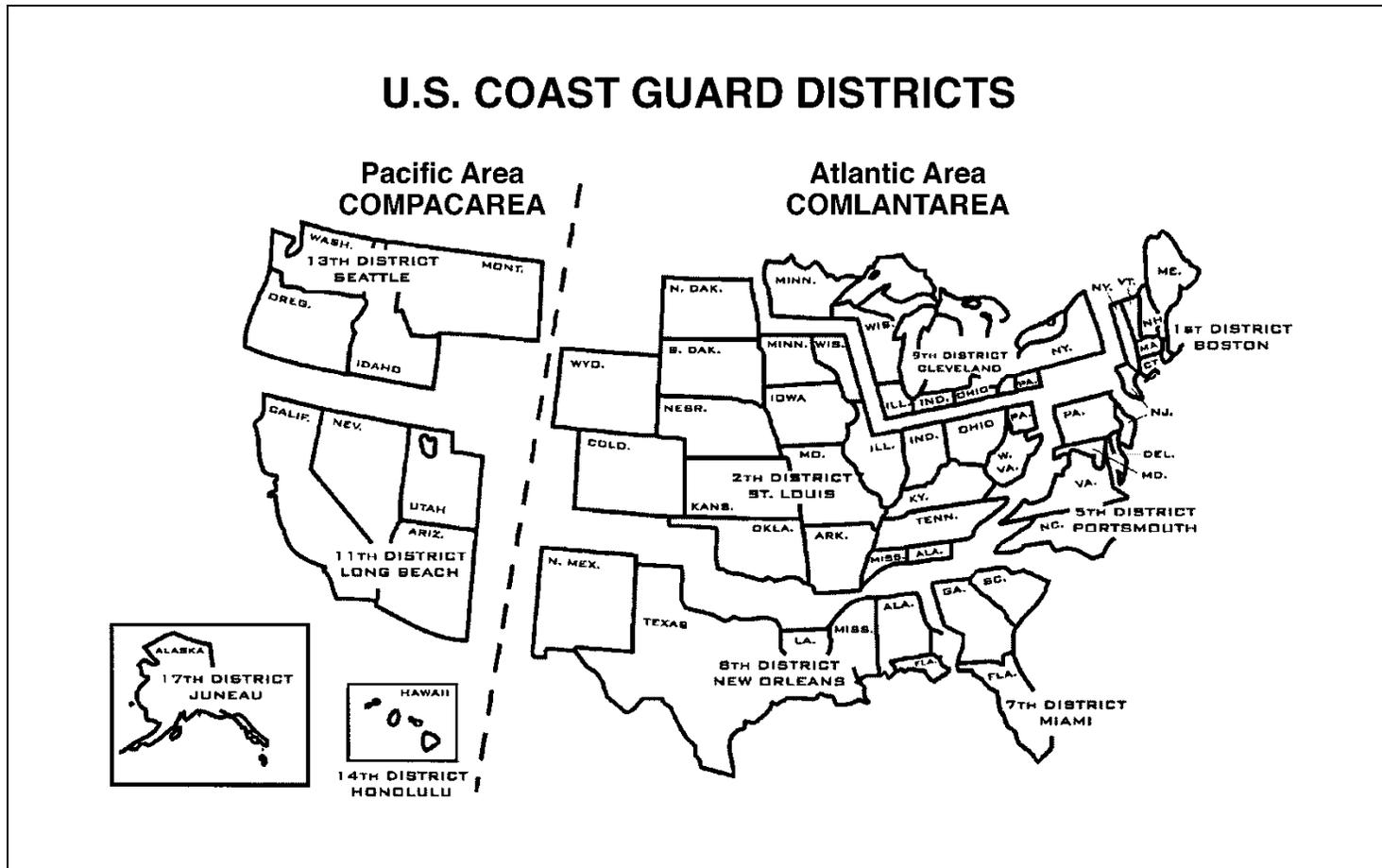


Figure 7-5.--United States Coast Guard District Boundaries

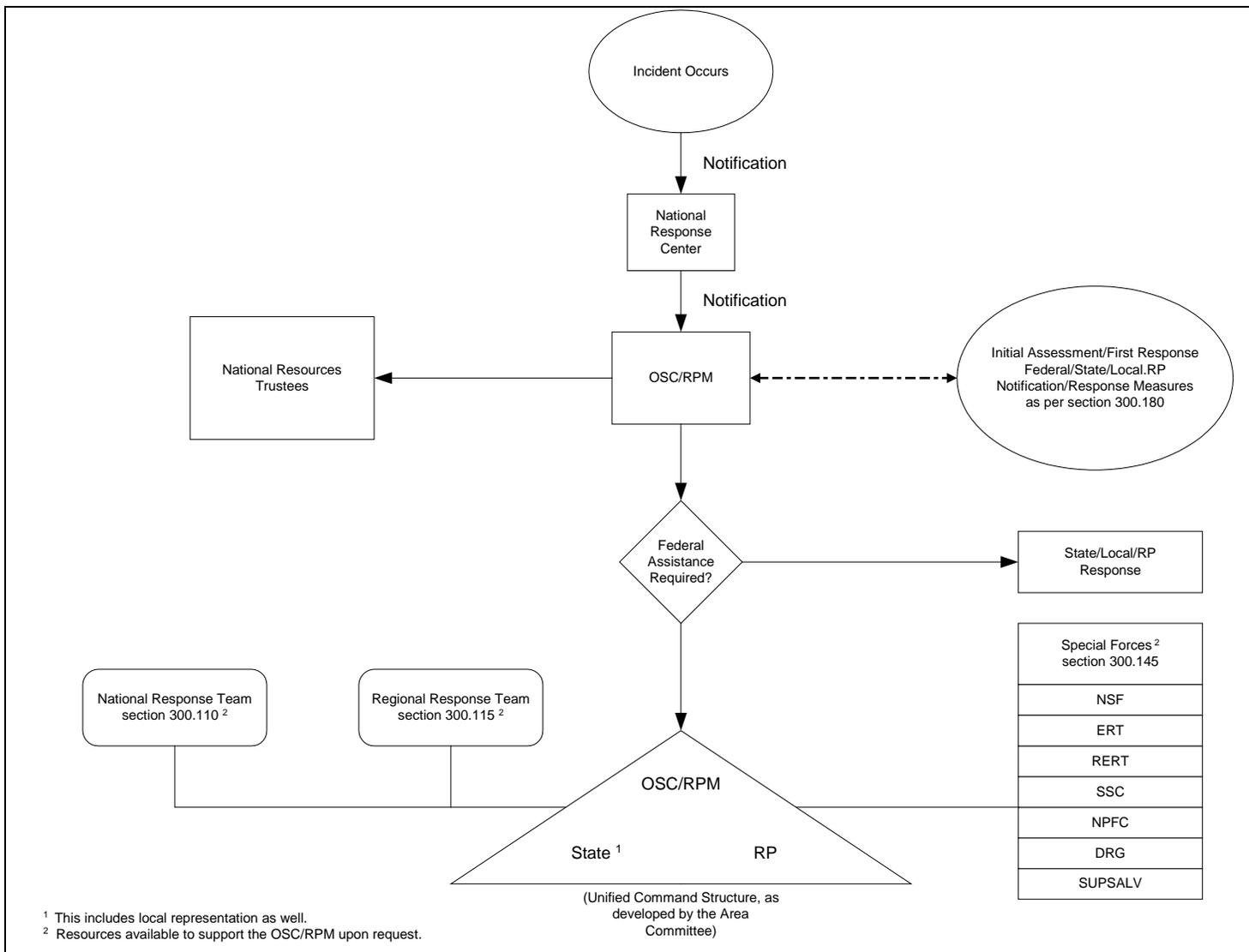


Figure 7-6.--National Response System Concepts: Response

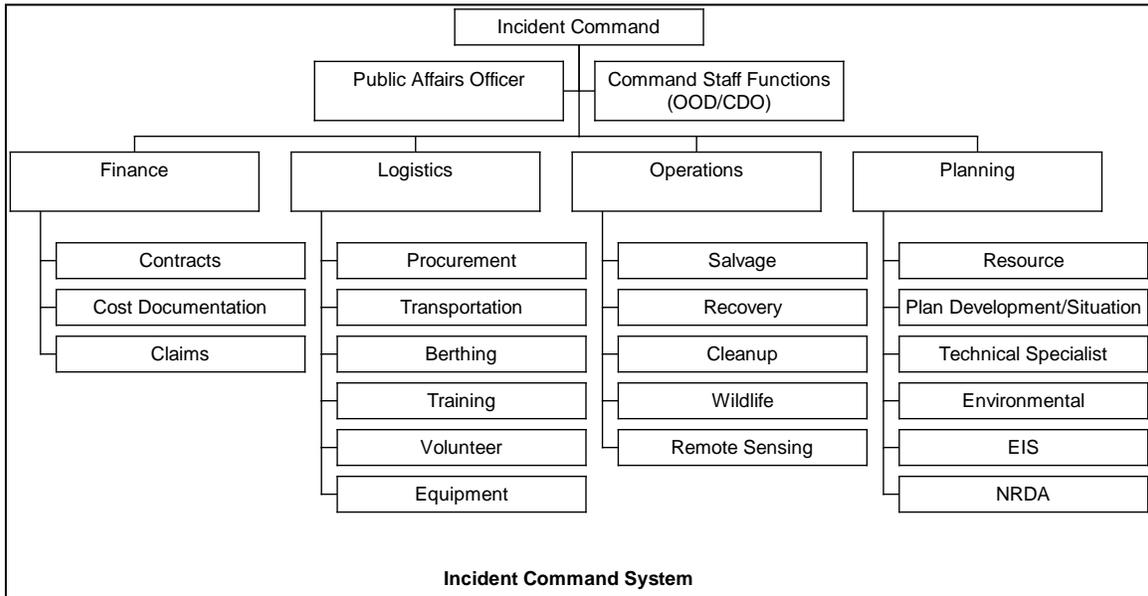


Figure 7-7.--Incident Command System

CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

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CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

SECTION 1: SCOPE

8100. PURPOSE. This chapter establishes Marine Corps policy and assigns responsibilities in accordance with the statutes and regulations cited in paragraph 8103 for achieving compliance with applicable Federal statutory and regulatory requirements, Presidential Memoranda, E.O.s, and DOD regulations and policies for the integrated management of cultural resources on Marine Corps lands or that may be affected by Marine Corps actions.

8101. APPLICABILITY. This chapter applies to all real properties under the control of the Marine Corps by ownership, lease, or similar instrument that are located in the United States; the District of Columbia; and the commonwealths, territories, and possessions of the United States. This chapter also applies to lands not under Marine Corps ownership, lease, or similar instrument in those cases where actions financed, permitted, or sponsored by the Marine Corps may affect cultural resources on such lands. As noted in paragraph 1101 of this Manual, these policies apply to overseas locations as well; exceptions will be identified as necessary throughout this chapter. Waters contiguous to the land areas may contain cultural resources; therefore, this chapter also applies to water areas under direct control of the Marine Corps and to submerged cultural resources located therein. For water areas under partial control, or that will be subject to impacts related to Marine Corps actions, the Marine Corps will take into account the effects of those actions on submerged resources located therein.

8102. BACKGROUND. Marines need access to a variety of landscapes and facilities to conduct training. However, training can impact cultural resources on public lands. The American people place intrinsic value on certain resources; failure to protect those resources under the stewardship of the Marine Corps may lead to legislative, executive, or judicial directives limiting Marine Corps access to lands necessary to maintain military readiness. Accordingly, Marine Corps installation commanders must work to guarantee continued access to our land, air, and water resources for realistic military training and testing. Installation commanders must ensure that the cultural resources entrusted to the Marine Corps care remain intact and available for future generations.

8103. FEDERAL STATUTES. This policy tiers off of the policies for cultural resources management outlined in Department of Defense Instruction (DODI) 4715.16 "Cultural Resources Management" and Secretary of the Navy Instruction (SECNAVINST) 4000.35A "Department of the Navy Cultural Resources Program". In addition, this policy incorporates the provisions of the following Federal legislation, E.O.s, DOD regulations and guidance, as appropriate to the management of cultural resources under the purview of the Marine Corps.

a. Legislation. (Statutes 2, 10, and 12 apply to overseas installations.)

(1) NEPA of 1969 (42 U.S.C. 4321)

(2) National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470-470x)

(3) Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. 3001-3013)

(4) Archeological Resources Protection Act (ARPA) of 1979, as amended (16 U.S.C. 470aa-mm)

(5) American Indian Religious Freedom Act (42 U.S.C. 1996 and 1996a)

(6) Antiquities Act of 1906 (16 U.S.C. 431-433)

(7) Abandoned Shipwreck Act of 1987 (43 U.S.C. 2101-2106)

(8) Archeological and Historic Data Preservation Act of 1974 (16 U.S.C. 469-469cc)

(9) Cooperative Agreements for Management of Cultural Resources (10 U.S.C. 2684)

(10) Federal Records Act of 1950 (44 U.S.C. 3101)

(11) Historic Sites Act of 1935 (16 U.S.C. 461-467)

(12) Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, concluded on May 14, 1954 (Treaty Doc. 106-1(A)) [Congressional Record, September 25, 2008, page S9555]

b. Federal Regulations. (Only regulation 14 applies to overseas installations.)

(1) 32 CFR 187, "Environmental Effects Abroad of Major Department of Defense Actions"

(2) 32 CFR 299, "Office of the Secretary of Defense - Implementation of ARPA"

(3) 36 CFR 60, "National Register of Historic Places"

(4) 36 CFR 61, "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation"

(5) 36 CFR 63, "Determinations of Eligibility for Inclusion in the National Register of Historic Places"

(6) 36 CFR 65, "National Historic Landmarks Program"

(7) 36 CFR 66, "Recovery of Scientific, Prehistoric, Historic and Archeological Data"

(8) 36 CFR 67, Section 7, "The Secretary of the Interior's Standards for Rehabilitation"

(9) 36 CFR 68, "The Secretary of the Interior's Standards for the Treatment of Historic Properties"

(10) 36 CFR 78, "Waiver of Federal Agency Responsibilities, Under section 110 of the National Historic Preservation Act"

(11) 36 CFR 79, "Curation of Federally-Owned and Administered Archeological Collections"

(12) 36 CFR 800, "Protection of Historic Properties"

(13) 40 CFR 1500-1508, "Council on Environmental Quality"

(14) 43 CFR 3, "Department of the Interior, Preservation of American Antiquities"

(15) 43 CFR 10, "Native American Graves Protection and Repatriation Regulations"

c. E.O.s and Presidential Memoranda. (E.O.s 2, 3, and 4 do not apply to overseas installations.)

(1) E.O. 11593, "Protection and Enhancement of the Cultural Environment"

(2) E.O. 13006, "Locating Federal Facilities on Historic Properties in our Nation's Central Cities"

(3) E.O. 13007, "Indian Sacred Sites"

(4) E.O. 13175, "Consultation and Coordination with Indian Tribal Governments"

(5) E.O. 13287, "Preserve America"

(6) E.O. 13327, "Federal Real Property Asset Management"

(7) E.O. 13423, "Strengthening Federal Environmental, Energy, and Transportation Management"

d. Federal Guidance

(1) 48 FR 22716, "The Secretary of the Interior's Professional Qualification Standards"

(2) 53 FR 4742, "Guidelines for Federal Agency Responsibilities, Under section 110 of the National Historic Preservation Act"

(3) 62 FR 33707, "The Secretary of the Interior's Proposed Historic Preservation Professional Qualification Standards"

e. DOD Regulations and Guidance. (Only items 2, 4, and 10 apply to overseas installations.)

(1) DODI 4710.02 "DOD Interactions with Federally-Recognized Tribes," 14 September 2006

(2) DOD Minimum Antiterrorism Standards for Buildings (UFC 4-010-01)

(3) SECNAVINST 11010.14, "Department of the Navy Policy for Consultation with Federally Recognized Indian Tribes"

(4) SECNAV M 5210.1, "Department of the Navy Records Management Program Records Management Manual"

(5) SECNAV Memorandum, "Historic Properties," 16 November 2001.

(6) Nationwide Programmatic Memorandum of Agreement (MOA) among the United States Department of Defense, the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers (Concerning World War II Temporary Buildings)

(7) Program Comment for Wherry and Capehart Era Family Housing at Air Force and Navy Bases

(8) Program Comment: DOD Cold War-Era Unaccompanied Personnel Housing

(9) Program Comment: DOD World War II- and Cold War-Era Ammunition Storage Facilities

(10) DODI 4715.5 "Overseas Environmental Baseline Guidance Document."

#### 8104. REQUIREMENTS

1. General. The Federal legislation, E.O.s, DOD regulations, and guidance pertaining to cultural resources establish requirements applicable to Marine Corps installations as outlined below.

2. Inventory and Evaluation. Each Marine Corps installation with real property management responsibilities must prepare an assessment of the current status of its inventory of historic properties, the general condition and management needs of such properties, and the steps underway or planned to meet those management needs as required by section 110(a)(2) of reference (a) and in accordance with reference (b). Codes reflecting the inventory status of Marine Corps real property should be updated in internet Navy Facilities Assets Data Store (iNFADS) on an annual basis. Refer to paragraph 8201 of this chapter for specific associated policies and requirements.

3. Resource Protection. Marine Corps installations must implement policies and procedures for assessing the condition of known cultural resources, avoidance or mitigation of impacts on cultural resources from Marine Corps actions or the actions of contractors or tenants working on Marine Corps installations, maintenance and treatment actions to ensure preservation or enhance the condition of cultural resources, management of the data related to cultural resources, and public outreach and education. Refer to paragraph 8202 for specific associated policies and requirements.

4. Consultation. Marine Corps installations have a responsibility to consult with internal and external stakeholders on a regular basis. References (a), (c), and (d) require coordination with interested parties and other government agencies, depending on the action involved. Refer to paragraph 8203 for specific associated policies and requirements.

5. Confidentiality Requirements. Cultural resource preservation statutes require Marine Corps installations to withhold certain information from disclosure to the public as explained in paragraph 8204.

6. Sustainability. One of the primary focuses of environmental stewardship

within the DOD is the concept of sustainability. Through conservation, improved maintainability, recycling, reduction and reuse of waste, and other actions and innovations, the Marine Corps can meet today's needs without compromising the ability of future generations to meet their own. Refer to paragraph 8205 for specific associated policies and requirements.

7. Annual Reporting and Metrics. The Marine Corps is responsible for responding to various data calls and asset management inventories as explained in paragraph 8206, including the new metrics outlined in reference (e).

8105. TERMS AND DEFINITIONS. As a general note, all of the following definitions apply to Marine Corps operations within the United States and its territories. For operations in overseas locations, Marine Corps personnel should apply the definitions provided in reference (f) for the host nation, where applicable, or definitions provided in host nation cultural property laws. Consulting partners in overseas locations should include the agency or agencies responsible for cultural resources or cultural property under host nation laws.

1. Adaptive Reuse. A new or different use of a historic property that does not irreversibly alter its character-defining features, is appropriate for the context, and is consistent with the significance and character of the property.

2. Advisory Council on Historic Preservation (ACHP). A Federal council, established by Title II of reference (a) and charged with advising the President, Congress, and other Federal agencies, whose function is to encourage private and public interest in historic preservation and archaeological resources protection and to comment on Federal agency actions under section 106 of reference (a).

3. Archaeological Resource. Any material remains of past human life that are capable of contributing to scientific or humanistic understanding of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques. To qualify as an "archaeological resource" under reference (g), the remains have to be at least 100 years old. Archaeological remains less than 100 years old may be eligible for listing in the NRHP and, if so, would be historic properties for which compliance in accordance with reference (a) is required.

4. Archaeological Survey. Archaeological survey is a systematic analysis by a professional meeting Secretary of Interior Standards sufficient to allow categorization of archaeological potential to the degree required to make decisions. The Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation recognize several techniques, methodologies, and types of surveys to allow a Federal land manager to make decisions about property use that is consistent with the legislated intent of protecting important archaeological properties including archival research, field surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing.

5. Architectural Survey and Evaluation. A survey and evaluation effort to determine which buildings, structures, works of engineering, industrial facilities, fortifications, and landscapes are eligible for listing in the

NRHP. Survey efforts typically involve examination of the historic context of the resource as well as its current integrity.

6. Area of Potential Effect (APE). The APE for an undertaking is determined in consultation with the State Historic Preservation Office (SHPO), Native American tribes/Native Hawaiian organizations (NHOs), and other interested parties. The APE includes not only the construction or ground disturbance footprint of the undertaking, but also the settings of any historic properties that may be impacted by the intrusion of new visual or noise elements.

7. Assessment of Effect. A process to determine whether an undertaking may affect in any way the qualities of a property that make it eligible for listing in the NRHP. The assessment is made by the installation's CG/CO in consultation with the SHPO, Native American tribes/NHOs, and other interested parties. If the Marine Corps finds that no historic properties are present or affected by the proposed action, it provides documentation to the SHPO and other consulting partners and, barring any objection in 30 days, proceeds with its undertaking. If the Marine Corps finds that historic properties are present, it proceeds to assess possible adverse effects based on criteria found in reference (h). If the SHPO and any consulting partners agree that there will be no adverse effect, the Marine Corps proceeds with the undertaking and any agreed-upon conditions. If the determination is that the action will have an adverse effect, or if the parties cannot agree and the ACHP determines within 15 days that there is an adverse effect, the agency begins consultation to seek ways to avoid, minimize, or mitigate the adverse effects.

8. Collections and Associated Records (per reference (h)). Collections are material remains that are excavated or removed during a survey, excavation, or other study of an archaeological or historic resource, and associated records that are prepared or assembled in connection with the survey, excavation, or other study (section 4(a) of reference (i)). Associated records are original records (or copies thereof) that are prepared or assembled, that document efforts to locate, evaluate, record, study, preserve, or recover an archaeological or historic resource (see section 4(2) of reference (i)). Associated records that are prepared or assembled in connection with the survey, excavation, or other studies are maintained per reference (j) SSIC 5750.2.

9. Consensus Determination. A consensus determination is a determination of a property's eligibility for listing on the NRHP made by consensus between the Marine Corps installation and the SHPO. Alternatively, installations or the SHPO can request an official determination of eligibility from the Keeper of the National Register.

10. Consultation. The process of seeking, discussing, and considering the views of others and, where feasible, seeking agreement with them on how historic properties shall be identified, considered, and managed.

11. Cultural Items. As defined by reference (d), human remains and associated funerary objects, unassociated funerary objects (at one time associated with human remains as part of a death rite or ceremony, but no longer in possession or control of the Federal agency or museum), sacred objects (ceremonial objects needed by traditional Native American religious leaders for practicing traditional Native American religions), or objects of

cultural patrimony (having ongoing historical, traditional, or cultural importance central to a Federally recognized tribe or NHO, rather than property owned by an individual Native American, and which, therefore, cannot be alienated, appropriated, or conveyed by any individual of the tribe or group).

12. Cultural Landscape. A cultural landscape is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values. A cultural landscape can be a historic site, historic designed landscape, historic vernacular landscape, or ethnographic landscape (see reference (k)).

13. Cultural Resources. A generic term commonly used to include buildings; structures; districts; archaeological sites; historic landscapes; cemeteries; resources of interest to Native American tribes or NHOs; and objects of significance in history, architecture, archaeology, engineering, or culture. The term also includes associated documents and records. Definitions for "cultural resources" in overseas locations should follow those provided in host nation laws and statutes.

14. Cultural Resources Manager (CRM). Ideally, the CRM for each Marine Corps installation shall be a cultural resources professional (e.g., a qualified anthropologist, archaeologist, architectural historian, historic architect, historian, or preservation planner) with specialized training and experience that meets the professional standards and qualifications established by the Secretary of the Interior. For large installations or installations with diverse cultural resources issues, the CG/CO is strongly encouraged to appoint a CRM that meets these requirements. For smaller installations or installations with fewer cultural resources issues, management of the cultural resources program is often performed as a collateral duty. In those instances, the CRM can be a staff person not necessarily qualified as a cultural resources professional who performs routine cultural resources compliance functions and contracts out for professional expertise as needed for specific projects. Such an individual must complete appropriate training to perform the CRM duties.

15. Curation. The management and preservation of an archaeological collection, including all associated documentation, according to professional museum and archival practices, in accordance with reference (i), to insure long-term care and protection of that collection.

16. Determination of Eligibility. A process to determine if a property is eligible for listing on the NRHP. A property can be determined eligible by consensus agreement between the installation and the SHPO or by determination by the Keeper of the National Register. Decisions by the Keeper cannot be challenged. Reference (a) provides equal protection to resources that are determined eligible for listing on the NRHP and those that are listed on the NRHP. For overseas locations, apply the relevant process outlined in the FGS or host nation cultural resources laws.

17. District. A geographically definable area (urban or rural) that possesses a significant concentration, linkage, or continuity of sites, structures, buildings, or objects united aesthetically by the plan or physical development or united by past events. A district may also comprise individual elements separated geographically but linked by association or

history.

18. Effect. Any condition of a project or undertaking that may cause a change in the quality of the historic, architectural, archaeological, or cultural character of a property that qualifies it for listing in the NRHP, the World Heritage List, or the host nation equivalent of the NRHP. An undertaking is considered to have an effect on a historic or cultural property when any aspect of the undertaking changes the integrity of location, design, setting, materials, workmanship, feeling, or association of the property that contributes to its significance. Direct effects are caused by the undertaking and occur at the place and time of the undertaking. Indirect effects are those caused by the undertaking that occur later in time or are further removed in distance, but are still reasonably foreseeable.

19. Federal Preservation Officer (FPO). The individual responsible for coordinating the agency's activities under references (a) and (l), including nominating properties under the agency's ownership or control to the NRHP. The Department of Navy has an FPO, who has appointed Deputy FPOs for the Navy and the Marine Corps.

20. Federal Land Manager. With respect to public lands, the secretary of the department or head of any other agency or instrumentality of the United States, having primary management authority over such lands, including persons to whom such management authority has been officially delegated.

21. Heritage Assets. Plant, property, and equipment items that are considered to be unique due to their historical or natural significance; cultural, educational or artistic importance; or significant architectural characteristics for the purposes of accountability under the Chief Financial Officers Act. "Heritage Assets" are addressed by procedures of this Act and "historic properties" as addressed by reference (a) are related, but separate, categories.

22. Historic Property. Reference (a) defines a "historic property" as any district, site, building, structure, landscape, traditional cultural property, or object that is included in or eligible for inclusion in the NRHP. For overseas locations, section 402 of reference (a) extends this definition to include any resources on the World Heritage List or on a host nation's equivalent to the NRHP.

23. Indian Tribe. Any tribe, band, nation, or other organized American Indian group or community of Indians, including any Alaska Native village or corporation as defined in, or established by, reference (m) that is recognized as eligible for special programs and services provided by the United States to Indians because of their status as Indians. Such acknowledged or "Federally recognized" Indian tribes exist as unique political entities in a government-to-government relationship with the United States. The Bureau of Indian Affairs maintains the listing of Federally recognized Indian tribes.

24. Integrated Cultural Resources Management Plan (ICRMP). A five-year plan developed, signed, and implemented by an installation commander to provide for the management of cultural resources in a way that maximizes beneficial effects on such resources and minimizes adverse effects and impacts without impeding the mission of the installation and its tenants.

25. MOA. An MOA is an agreement document developed by a Federal agency, in cooperation with the SHPO/THPO and other consulting parties, to specify how the adverse effects of an undertaking under section 106 of reference (a) will be resolved. An MOA stipulates measures to reduce adverse effects, or accepts the effects as being unavoidable and in the public interest.

26. Mitigation. In cultural resources management, mitigation is a means of lessening the adverse effects of an undertaking on properties listed in or eligible for listing in the NRHP or cultural properties listed on the World Heritage List or on a host nation equivalent of the NRHP. Mitigation can include limiting the magnitude of the action; repairing, rehabilitating, or restoring the affected property; recovering and recording data that may be destroyed or substantially altered from cultural properties; and avoiding the or part of an action, or by relocating the action. Mitigation can also include compensatory measures, such as purchase of preservation easements, funding of related research, or development of public education products.

27. National Historic Landmark (NHL). An historic property designated by the Secretary of the Interior as having exceptional significance in the Nation's history and which is subject to the most stringent preservation requirements.

28. National Park Service (NPS). The NPS is the bureau of the Department of the Interior (DOI) to which the Secretary of the Interior has delegated the authority and responsibility for administering the National Historic Preservation Program.

29. National Register Criteria. The criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for listing in the NRHP, as per reference (n).

30. NRHP. A nationwide listing of districts, sites, buildings, structures, and objects of national, state, or local significance in American history, architecture, archaeology, or culture that is maintained by the Secretary of the Interior. NRHP listings must meet the criteria found in section 4 of reference (n). For overseas locations, refer to either the World Heritage List or the host nation's equivalent to the NRHP.

31. Native Hawaiian. Any descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the state of Hawaii.

32. NHO. An NHO is defined as any organization that:

a. Serves and represents the interests of Native Hawaiians.

b. Has as a primary and stated purpose the provision of services to Native Hawaiians.

c. Has demonstrated expertise in aspects of historic preservation that are culturally significant to Native Hawaiians. The term includes, but is not limited to, the Office of Hawaiian Affairs of the state of Hawaii and Hui Malama I Na Kupuna O Hawai'i Nei, an organization incorporated under the laws of the state of Hawaii.

33. Programmatic Agreement (PA). A written agreement among the Federal

agency, SHPO, ACHP, Native American tribes, or NHOs, that stipulates how to carry out a program or a class of undertakings, repetitive in nature or similar in effect, so as to avoid or mitigate adverse effects on cultural resources. A PA is used to streamline compliance with section 106 of reference (a); PAs cannot be used for compliance with other Federal statutes.

34. Recordation. Measured drawings, photographs, and other techniques that are:

a. Undertaken to provide a permanent record of resources that must be destroyed or substantially altered.

b. Performed under the guidance of the keeper of the NRHP through the Historic American Buildings Survey/Historic American Engineering Record.

35. Restoration. The act or process of accurately recovering the form and details of property and its setting as it appeared at a particular period of time.

36. SHPO. The person who has been designated in each state to administer the State Historic Preservation Program, including identifying and nominating eligible properties to the NRHP and otherwise administering applications for listing historic properties in the NRHP. For overseas locations, refer to the host nation's cultural resources laws or policies to identify the equivalent agency.

37. Stewardship. The management of resources entrusted to one's care in a way that preserves and enhances the resources and their benefits for present and future generations.

38. Tribal Historic Preservation Officer (THPO). A THPO appointed or designated in accordance with reference (a) is the official representative of a Tribe for the purposes of section 106.

39. Undertaking. "An undertaking is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license, or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a Federal agency" as presented in section 16(y) of reference (h).

## CHAPTER 8

### CULTURAL RESOURCES MANAGEMENT

#### SECTION 2: MARINE CORPS POLICY

8200. GENERAL. In accordance with reference (a) and DOD policy, the Marine Corps is responsible for managing and maintaining cultural resources under its control through a comprehensive program that considers the preservation of their historic, archaeological, architectural, and cultural values, is mission-supporting, and results in sound and responsible stewardship. Through the integration of its cultural resources management policies and procedures with Marine Corps mission, the Marine Corps will provide stewardship of cultural resources in a sustainable manner that supports the mission and promotes the quality of life for stakeholders.

8201. INVENTORY AND EVALUATION. Section 110 of reference (a), and in accordance with reference (o), calls for Federal agencies to maintain accurate information on the state of Federally-owned historic properties. Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of reference (a) or, per reference (f), inventories of properties listed on the World Heritage List or host nation equivalent of the NRHP. This assessment should include information on the general condition and management needs of such properties, and the steps underway or planned to meet those management needs.

1. Inventory. All Marine Corps installations are responsible for identifying cultural resources within the installation boundaries, and maintaining complete and current information regarding resource location, significance, condition, and use. Marine Corps installations will proactively program projects for survey of unsurveyed or inadequately surveyed land parcels or unevaluated buildings/structures within the installation, prioritizing surveys according to land use and the potential to affect cultural resources. Survey priority goals may be aligned with environmental review of proposed undertakings (e.g., surveys in support of section 106 undertakings may take priority); however, annual programmed survey goals should typically exceed acreage or buildings/structures to be affected by installation's proposed undertakings. Inventory of historic buildings and structures should be done in conjunction with their evaluation and take place when buildings/structures turn 50 years in age; both survey and evaluation should be preceded by development of detailed historic contexts for the installation. Inventory of resources of traditional, religious, or cultural significance to Native American tribes or NHOs should be completed in consultation with representatives of affiliated tribes or organizations. Inventories of host nation cultural properties should be coordinated with host nation officials, as directed by the relevant reference (f).

2. Evaluation. All Marine Corps installations are responsible for evaluating the National Register eligibility or host nation significance of identified resources within the boundaries of the installation. Marine Corps installations will proactively program projects for evaluation of cultural resources on an annual basis, prioritizing evaluation of resources in consultation with internal and external stakeholders, and as necessary to support environmental reviews for undertakings. Evaluation of traditional

cultural properties or other resources of traditional, religious, or cultural significance to Native American tribes or NHOs should be completed in consultation with representatives of affiliated tribes or organizations. Evaluations of host nation cultural properties should be coordinated with host nation officials, as directed by the relevant reference (f). Properties previously determined eligible or ineligible may periodically require re-evaluation due to the passage of time, evolving understanding of historical significance, or inadequate previous evaluations.

3. Nomination. All Marine Corps installations are responsible for nominating historic properties to the NRHP, as appropriate to facilitate the mission, in consultation with Headquarters United States Marine Corps (HQMC). Nomination forms prepared by installations should be submitted to the SHPO and any consulting partners, as applicable, for review and comment, and should be staffed for signature by the USMC Deputy FPO. Once signed, the forms will be returned to the installation for submittal to the Keeper of the National Register through the SHPO. Marine Corps commanders should prioritize nominations based on installation planning requirements; those resources that have potential for public use or access should be nominated first to facilitate outreach or heritage tourism efforts. CG/COs should be aware that resources determined eligible for listing on the NRHP are afforded the same level of protection as those listed on the NRHP. Overseas installations do not have this requirement; evaluations are coordinated with the appropriate host nation official, who applies host nation procedures for nomination to local, prefectural, or national cultural property lists.

4. Permits. In some instances, archaeological investigations may require Federal, state, or host nation permits. The most common categories of permits are described below.

a. ARPA Permits

(1) ARPA permits are required when the following three criteria are met:

(a) The project is on Federal land.

(b) Digging or collection of artifacts will occur.

(c) The participants are not directly contracted to or by the Marine Corps.

(2) Reference (p) provides guidance for DoD compliance with the requirements of ARPA; language related to permits is included in parts 229.5 through 229.11. For the purposes of Marine Corps compliance with references (g) and (p), the CG/CO is considered the Federal land manager as defined in section 3(c) of reference (q). As the Federal land manager, the CG/CO will issue ARPA permits when required and will ensure that applicants meet the professional standards for "Archeologist" outlined in reference (r). Permits for archaeological investigations that could result in the excavation or removal of American Indian human remains and other cultural items as defined in reference (d), or in the excavation of archaeological resources that are of religious or cultural importance to Federally recognized tribes and NHOs, will be issued after the CG/CO conducts consultation in accordance with section 5 of reference (o) and section 7 of reference (p) with the culturally affiliated Indian tribes or NHOs (see also section 7 of reference (p)). The

CG/CO will ensure that documentation of consultation with culturally affiliated Indian tribes is prepared and maintained as part of the record of each such permit. ARPA permits shall provide for the disposition of NAGPRA cultural items in accordance with subsections 3(a) and 3(b) of reference (d) and in accordance with reference (q), or for the appropriate curation of collections under reference (i) (see also section 13 of reference (r)). Also in accordance with section 9 of reference (g) and parts 229.9 and 229.18 of reference (p), the CG/CO may withhold information concerning the nature and location of archaeological resources from the public under Subchapter II of chapter 5 of Title 5 of the United States Code (U.S.C.)(see reference (s)) or under any other provision of law.

b. Other Federal Agency Permits. In situations where the Marine Corps must conduct archaeological investigations on lands owned by other Federal agencies, the Marine Corps will coordinate with that agency's representative to determine whether permits are necessary in advance of the investigations. Examples of Federal agencies that require permits include the Bureau of Land Management and the U.S. Forest Service.

c. Host Nation Permits. Overseas installations should refer to the appropriate FGS regarding permit requirements for archaeological investigations.

8202. RESOURCE PROTECTION. Although inventory and evaluation of cultural resources are critical aspects of the Marine Corps cultural resources management program, as well as necessary for compliance with Federal statutes and regulations, management must also include policies and procedures for assessing the condition of known resources, avoidance or mitigation of impacts on cultural resources from Marine Corps actions or the actions of contractors or tenants working on Marine Corps installations, maintenance and treatment actions to ensure preservation or enhance the condition of cultural resources, management of the data related to cultural resources, and public outreach and education. The Marine Corps will ensure that such properties are not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.

1. ICRMPs. Reference (e) requires that all installations with cultural resource management responsibilities develop and implement ICRMPs in consultation and partnership with internal and external stakeholders of the cultural resources management program. The ICRMP, which is signed and implemented by the installation commander, is the planning tool for consolidating the inventory and management requirements as per reference (a) and other statutes, and so is an essential element in legal compliance with those statutes. The Marine Corps develops ICRMPs as management tools to insure the most time- and cost-efficient method of integration with project and operations planning to facilitate mission. Guidelines for preparing ICRMPs for Marine Corps installations are provided by HQMC, based on the list of required elements for ICRMPs noted in reference (e). All ICRMPs will be reviewed annually and updated as required. Installation commanders are encouraged to implement their ICRMP through a base order.

## 2. Project Review

a. Environmental Review. The NEPA process (or process for overseas installations per reference (t)) is intended to help public officials make decisions that are based on an understanding of environmental consequences

and take actions that protect, restore, and enhance the environment, including the cultural environment. Although reference (c) and section 106 of reference (a) processes (or references (f) and (t) review processes for overseas installations) can be coordinated for specific undertakings, the two processes are separate requirements. For example, a project may receive a Categorical Exclusion (CATEX) under reference (c), but still require review under Section 106 of reference (a). Marine Corps installations are responsible for ensuring that accurate information regarding cultural resources and the potential impacts of a Proposed Action or Alternatives on such resources are included in all NEPA analyses completed for the installation. To ensure that cultural resources concerns are adequately addressed in the USMC environmental review process, the installation CRM should be included in the review of Record of Environmental Review Forms and participate in Environmental Impact Review Boards (EIRBs).

b. **NHPA.** Section 470f of reference (a) states: "The head of any Federal agency having a direct or indirect jurisdiction over a proposed Federal or Federally-assisted undertaking in any state and the head of any Federal department or independent agency having authority to license an undertaking shall, prior to approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effects of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP. The head of any such Federal agency shall afford the ACHP established under part B of this subchapter a reasonable opportunity to comment with regard to such undertaking." An undertaking is defined as any Federal, Federally-assisted, or Federally-licensed action, activity, or program, new or continuing, that may have an effect on historic properties. Consultation with the SHPO and/or the ACHP is a critical step in this process. If an undertaking on Federal lands may affect properties having historic value to a Native American tribe, Alaskan Native village or corporation, or NHOs, such entity shall be afforded the opportunity to participate as consulting parties during the consultation process defined in reference (h). The section 106 process is designed to identify possible conflicts between historic preservation objectives and the proposed activity, and to resolve those conflicts in the public interest through consultation. Neither reference (a) nor ACHP regulations require that all historic properties must be preserved. They only require the agency to consider the effects of the proposed undertaking on those properties and fulfill the procedural requirements for reference (a) prior to implementation. The underlying purpose of reference (a) is to balance progress with preservation. Failure of the Marine Corps to take into account the effects of an undertaking on historic properties, and afford the ACHP a reasonable opportunity to comment on such effects, can result in formal notification from the ACHP to the Secretary of the Navy (SECNAV) of foreclosure of the ACHP's opportunity to comment on the undertaking pursuant to reference (a). Litigation or other forms of redress can be used against the DON in a manner that can halt or delay critical activities or programs. A summary of the procedural requirements of section 106 is available on the ACHP's Web site [www.achp.gov](http://www.achp.gov) (incorporates amendments effective 5 August, 2004). Because both reference (a) and its implementing regulations (see reference (h)) are subject to change, Marine Corps personnel should check this website periodically. Compliance with section 106 can also be governed by the terms of an agreement document or program alternative, such as a Program Comment, MOA, or PA. Installation CG/COs should review all agreement documents that pertain to management of cultural resources on their installations to identify the roles and responsibilities assigned to the

installation under each agreement. Examples of such agreements include the Program Comments referenced in paragraph 8103.c and PAs governing section 106 of reference (a) compliance for the various public-private venture (PPV) ground leases. For overseas installations, section 402 of reference (a) states that "Prior to the approval of any Federal undertaking outside the United States which may directly and adversely affect a property which is on the World Heritage List or on the applicable country's equivalent of the National Register, the head of a Federal agency having direct or indirect jurisdiction over such undertaking shall take into account the effect of the undertaking on such property for purposes of avoiding or mitigating any adverse effects." Currently, there are no implementing regulations for Section 402; however, the core elements of the "take into account" process are encompassed in reference (f).

3. Emergency Situations. Per section 12 of reference (h)(emergency situations), the timeline for section 106 review of renovations and repairs to historic buildings can be substantially reduced if the renovation or repair is required as a result of an emergency situation (e.g., flooding, tornados, earthquakes, or hurricanes). The reduction of the timeline only applies in those situations where the President or the Governor has declared an official state of emergency. The Marine Corps notifies the ACHP, the SHPO/THPO, and any other interested parties of the project; these parties then have seven days rather than the traditional 30 days to comment on the undertaking. As a proactive measure, the Marine Corps could also work with the ACHP, SHPO/THPO, and interested parties to develop a PA (see paragraph 8202.3) outlining streamlined procedures for emergency situations. Marine Corps installations will ensure that all reasonable efforts are made to avoid or minimize disturbance of significant cultural resources during emergency operations and will communicate with applicable Marine Corps personnel and external stakeholders regarding potential effects on significant cultural resources that could occur in association with such activities. Once the emergency has passed, Marine Corps installations will complete all appropriate actions to complete the section 106 process, including submittal of any reports or correspondence documenting the actions taken. Although reference (h) does not apply to overseas installations, the policies outlined above should be considered a BMP to the extent they do not conflict with reference (f).

4. Program Alternatives. Program alternatives, as defined in section 14 of reference (h), may be used as an alternative to case-by-case consultation under section 106 of reference (a). Appropriate applications are described in reference (h) and include efforts to streamline compliance with respect to categories of similar undertakings, categories of similar effects, or programmatic approaches that apply state, regional or nationwide. Implementation and use of program alternatives generally requires up-to-date inventories and a comprehensive management approach. As applicable, cultural resources staff shall incorporate the terms of existing program alternatives into NHPA section 106 consultations. Such program alternatives include PAs, program comments, standard treatments, exemptions, and alternative procedures. Adopting any program alternative requires consultation with relevant stakeholders and, for regional or national alternatives, coordination with the chain of command and other affected commands and agencies. Marine Corps installations are encouraged to pursue program alternatives with stakeholders, as appropriate, to streamline compliance with Federal regulations or structure protocols for consultation and responses to situations such as inadvertent discovery of human remains. Program

alternatives are recommended as best practice with Marine Corps policy as a way to document adequate consultation within the administrative record as well as streamline Marine Corps actions and facilitate mission. It should be noted that Program Comments do not apply to overseas installations.

#### 5. Monitoring, Maintenance, and Treatment

a. For archaeological resources, Marine Corps installations must develop procedures for monitoring the condition of known archaeological sites for evidence of disturbance from natural processes such as erosion, fire, or floods; or human action, such as training activities, landscape maintenance activities, recreational use, or intentional looting. Monitoring procedures should be paired with procedures for stabilizing site condition should impacts be noted, documenting site condition, and reporting impacts to the appropriate stakeholders such as the SHPO, American Indian tribes and NHOs with ancestral ties to the installation, or appropriate host nation officials. CRMs and Conservation Law Enforcement Officers should obtain ARPA training in order to learn the proper procedures for enforcement of ARPA and reporting ARPA (or host nation equivalent) violations on Marine Corps installations, and should ensure that all installation personnel who conduct activities that have the potential to impact archaeological resources are provided with training on how to avoid such impacts as well as SOPs to follow should archaeological materials be inadvertently discovered. Specific guidance on enforcement of ARPA on DOD lands, including discussion of prohibited acts and criminal penalties, assessment of penalties and reporting, is provided in reference (p). The CG/CO will ensure that military police; installation legal staff; the installation PAO; and the fish, game, and recreation management staff are familiar with the requirements and applicable civil and criminal penalties under references (g) and (p). CG/COs will ensure that land use instruments allowing for military use are reviewed to determine proper roles and responsibilities.

b. For situations involving resources of interest to Indian tribes or NHOs that have a tangible, physical footprint on Marine Corps installations (e.g., areas containing medicinal plants, human burial sites, petroglyphs, identified cultural landmarks) or protected cultural properties on overseas installations, the Marine Corps should develop a monitoring procedure in consultation with the appropriate tribes, villages/corporations, NHOs, or host nation officials. Marine Corps installations should ensure that procedures for reporting inadvertent discoveries of human remains or items of cultural patrimony are distributed to all installation personnel, tenants, and contractors. To facilitate consultation regarding inadvertent discoveries, domestic Marine Corps installations are encouraged to pursue comprehensive agreements or NAGPRA Plans of Action with affiliated tribes or organizations.

c. For historic buildings, structures, or districts that are eligible for or listed on the NRHP, or designated as protected cultural properties on overseas installations, installations should develop Maintenance and Treatment Plans (MTPs) for long-term care of these resources. An MTP identifies the historic properties (buildings, structures, landscapes, and districts), their character-defining features and contributing elements, building materials and condition, and promotes the preservation of these resources through planning, design, cyclic maintenance, and appropriate treatments for repair, rehabilitation, and restoration. An MTP is typically a five-year management plan that provides guidance to CRMs and installation

maintenance and facilities personnel working with historic structures to address problems of deterioration or failure of building materials and systems and addresses repair and renovation materials that will continue to maintain historic significance of the historic property. An MTP is generally installation-specific due to the complexity of each installation and overlaying construction periods, and should focus on a range of alternatives and treatments from stabilization to restoration.

6. NHLs. (Guidance does not apply to overseas installations.)

a. Section 101(b) of reference (a) provides for the inclusion of NHLs in the NRHP. Section 110(f) affords NHLs more stringent protection than other NRHP resources. Federal regulations outline procedures for consultation with the SHPO, the ACHP, and the NPS to minimize harm to NHLs by Federal agency undertakings.

b. The NPS maintains a continued relationship with owners of NHLs. Agencies must cooperate with the procedures of periodic visits, contacts with SHPOs, and other appropriate measures that the NPS uses to ensure that landmarks retain their integrity, to advise agencies concerning accepted preservation standards, and to update administrative records on landmark properties. The DOI reports annually to Congress regarding damaged or threatened NHLs.

c. Although property owners and SHPOs may nominate NHLs, designation ordinarily occurs after a study by the NPS. Preservation is not absolutely required as long as mandated procedures are followed and documented in any decision not to preserve. A finding of adverse effect to a NHL requires full ACHP participation in the consultation process.

7. Curation.

a. The overall goal of the Federal curation program, as set forth in reference (i), is to ensure the preservation and accessibility of cultural resource collections and documents for use by members of the public interested in the archaeology and history of the region. In accordance with the requirements of reference (i), the installation CG/CO must ensure that all archaeological collections and associated records, as defined in part 79.4(a) of reference (i), are processed, maintained, and preserved. Associated Records shall be maintained, and preserved per reference (j), SSIC 5750.2.

b. Collections from Federal lands should be deposited in a repository that meets the standards outlined in reference (h) to ensure that they will be safeguarded and permanently curated in accordance with Federal guidelines. A curation facility is specifically designed to serve as a physical repository where collections and records are sorted, repackaged, assessed for conservation needs, and then placed in an appropriate, environmentally-controlled, secure storage area. Collections from Federal lands remain the property of the Federal Government; accordingly, CRMs should schedule an annual visit to the curation repository to ensure that the collections are being managed appropriately. Please note that any historic ordnance encountered during an archaeological investigation must be inspected and rendered inert by Marine Corps Explosives Ordnance Disposal (EOD). Marine Corps EOD and HQMC-LF are developing guidance related to collection and curation of historic inerted ordnance.

c. The procedures outlined in reference (i) do not apply to overseas installations; refer to any curation language provided in the relevant FGS.

8. Data Management. Integrating cultural resources management data with the installation geographic information system (GIS) program allows the cultural resources program to more efficiently support the Marine Corps mission of readiness. GIS layers should be developed for all categories of cultural resources present within the installation (e.g., historic buildings, archaeological sites, and resources of interest to Indian tribes and NHOs). GIS layers should also be developed to show the progress of archaeological survey efforts and any sensitivity assessments used by the installation to prioritize survey efforts. GIS can facilitate integration of cultural resource BMPs into installation planning and projects. GIS layers and themes depicting archaeological resources and sacred sites are considered sensitive and will not be released to the general public. These layers should be password protected. When preparing the scope of work for contracts addressing cultural resources issues, installations should include the language for GIS requirements provided in reference (u) to ensure that GIS deliverables meet Federal standards and are compatible with Marine Corps data models.

9. Public Outreach. Reference (b) encourages Federal agencies to preserve America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the Federal Government; promoting intergovernmental cooperation and partnerships for the preservation and use of historic properties; inventorying resources; and promoting heritage tourism. A preservation awareness program must be directed to both Marine Corps personnel and external interests if it is to be effective. Education can promote awareness of important Marine Corps cultural resources projects and the rationale behind them. Special events with local and national significance offer excellent opportunities to educate the public on cultural resources preservation. Events such as Earth Day (22 April), Fourth of July, Veteran's Day, National Historic Preservation Week (third week in May), National Public Lands Day (last Saturday in September), and local town celebrations are opportunities for the Marine Corps to help educate people about cultural resources and preservation principles. Although the public outreach and heritage tourism elements of reference (b) do not apply to overseas installations, development of a preservation awareness program for internal and external stakeholders should be considered a best management practice.

## 8203. CONSULTATION

### 1. Consultation with Internal and External Stakeholders

a. To ensure that management of cultural resources is integrated with installation planning and in compliance with Federal statutes and regulations, the Marine Corps has a responsibility to consult with internal and external stakeholders on a regular basis. References (a), (c), and (d) and the FGS require varying levels of coordination with interested parties and other government or host nation agencies, depending on the action involved. External agencies and stakeholders that might be involved in cultural resources management include:

- (1) Other Federal Agencies.

- (2) SHPOs.
- (3) American Indian tribes, Alaskan Native villages and corporations, or NHOs.
- (4) ACHP.
- (5) NPS.
- (6) Keeper of the National Register, DOI.
- (7) Host nation officials.
- (8) Interested members of the public, including ethnographic groups, historic organizations, and others.

b. Although the Marine Corps might contract cultural resources professionals to conduct surveys and evaluations, it is the responsibility of the Marine Corps to consult with external stakeholders. Consultation should not be delegated to contractors (including NAVFAC or the U.S. Army Corps of Engineers). The Marine Corps will comply with all pertinent laws and regulations concerning the management and preservation of cultural resources and will, where appropriate, consult or coordinate with external stakeholders, as required:

- (1) To comply with reference (a) sections 106, 110, and 402.
- (2) To comply with references (c) or (t).
- (3) In accordance with reference (a), if the Marine Corps and the SHPO come to a disagreement regarding NRHP eligibility recommendations, the Keeper of the National Register can be consulted. Guidance on preparing a determination of eligibility can be found at section 3(d) in reference (v).
- (4) In accordance with reference (a), if the Marine Corps and the SHPO come to a disagreement regarding the section 106 process, the ACHP may assist. The Marine Corps must also invite the ACHP to participate in consultations regarding the resolution of adverse effects to historic properties.
- (5) In accordance with references (a), (c), (d), and (f), the CRM shall coordinate with interested American Indian tribes, Alaskan Native villages and corporations, or NHOs.
- (6) In accordance with reference (a), the CRM will consult with the NPS for all section 106 undertakings that have the potential to affect an NHL.

2. Consultation with Native Americans. References (a), (w), (x), (y), (z), and (aa) include guidance on how Federal agencies should consult with federally recognized American Indian tribes, and Alaskan Native villages and corporations, and NHOs. It should be noted that not all of this guidance refers to all Native entities (e.g., reference (z) refers only to Indian tribes and Alaskan Native Villages). Consultation takes on many forms, but must be conducted on a government-to-government basis unless delegated by agreement to subordinate representatives of each government (e.g., the THPO

and installation CRM). Consultation responsibilities cannot be delegated to contractors, even in those instances where management responsibility for some resources has been delegated to another entity (e.g., in the case of PPV contracts, the Marine Corps retains the responsibility for consultation with American Indian tribes and NHOs). The Marine Corps might need to consult on a project basis for proposed actions that could affect cultural resources of interest to American Indian tribes, Alaskan Native villages and corporations, and NHOs. If Marine Corps activities have the potential to affect such resources, all interested American Indian tribes, Alaskan Native villages and corporations, and NHOs will be consulted early in the planning process and their concerns will be addressed to the greatest extent possible. Establishing a permanent relationship with American Indian tribes, Alaskan Native villages and corporations, and NHOs will lead to better understanding of each party's interests and concerns and development of a trust relationship. This will streamline future project-based consultation and streamline the inadvertent discovery process. It is the goal of the consultation process to identify both the resource management concerns and the strategies for addressing them through an interactive dialogue with appropriate American Indian tribes, Alaskan Native villages and corporations, and NHOs.

8204. CONFIDENTIALITY REQUIREMENTS. Section 470w-3(a) of reference (a) (Confidentiality of the location of sensitive historic resources) states that:

1. "The head of a Federal agency or other public official receiving grant assistance pursuant to this Act, after consultation with the Secretary, shall withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary and the agency determine that disclosure may:
  - a. cause a significant invasion of privacy.
  - b. risk harm to the historic resources.
  - c. impede the use of a traditional religious site by practitioners."

On Federal property, reference (g) also provides provisions for restriction of information on archaeological site locations. American Indian tribes and NHOs have an interest in restricting this information and are not expected to divulge such location information unless they can be reassured of restrictions for access. Therefore, it is extremely important that persons using this document and other cultural resources reports and maps understand that access to all archaeological resource descriptions and locations is restricted to the CRM or Environmental Manager for internal use only. Access to such information in databases and GIS should be limited to CRMs, cultural resource professionals and others with a substantial need to know.

8205. SUSTAINABILITY. The Federal Government encourages agencies to take the lead in being stewards of the environment, to preserve today's resources for the future. One of the primary focuses of environmental stewardship within the DOD is the concept of sustainability; this concept applies to design, construction, operations, and resource conservation. Sustainability is responsible stewardship of the nation's natural, human, and financial resources through a practical and balanced approach. Sustainable practices

are an investment in the future. Through conservation, improved maintainability, recycling, reduction and reuse of waste, and other actions and innovations, the Marine Corps can meet today's needs without compromising the ability of future generations to meet their own. Applying sustainability principles to cultural resources management, chapter 4 of reference (ab), notes that "sustainability has often been an integral part of the composition of both tangible and intangible cultural resources. Ecological sustainability and preservation of cultural resources are complementary. In large part, the historic events and cultural values that are commemorated were shaped by humankind's response to the environment. When a cultural resource achieves sufficient importance that it is deemed historically significant, it becomes a nonrenewable resource worthy of consideration for sustainable conservation. Management, preservation, and maintenance of cultural resources should be directed to that end."

1. Archaeological Resources. Archaeological sites provide a physical record how people have interacted with their environment in the past and what that tells us of how they led their lives. It is the product of ongoing change, stretching from the distant past into the present. Physically, this record is non-renewable - in each period, a combination of natural and cultural processes almost inevitably impacts the record of previous periods. Intellectually, the record is in a constant flux of discovery, redefinition and interpretation through archaeological investigation and dissemination. Present uses will provide grist for the archaeologists of the future - the physical record of how we have lived and treated our environment and how much of our past we pass on to our successors. With respect to sustainability, archaeological sites on Marine Corps installations can be considered:

a. The only source for understanding the development of human society in prehistoric and much of historic times within the lands contained within installations.

b. A source of enjoyment and interest through intellectual and physical engagement and leisure-time pursuits, contributing to general mental, spiritual and physical health.

c. An important medium for general education, life-long learning, and personal development.

d. A vital basis of people's awareness of historical and cultural identity, sense of community and place, and a key source of perspective on social change.

e. A means of understanding long-term environmental change in relation to sustainability.

f. A source of evidence about past use of renewable energy and recyclable resources such as water, timber, mineral resources, and organic waste.

These benefits can be maximized by enhancing people's awareness of archaeology and the historic environment and developing a culture, within government and the private sector and in their dealings with others, of promoting active involvement, care, and appreciation for the benefit of present and future generations.

Archaeology and the historic environment contribute significantly to people's quality of life. The Marine Corps has a responsibility for stewardship of this environment so that it can continue to inform present and future populations about our shared past. At the same time, stewardship must be integrated into the Marine Corps mission. In addition to promoting public awareness of archaeological information and the benefits of preservation to the larger installation community (see paragraph 8202.9), Marine Corps installations should employ innovative technical and interpretive practices to integrate archaeology into the success of the mission.

2. Historic Buildings and Structures. When making decisions regarding replacement, renovation, or demolition of historic buildings and structures, it is Marine Corps policy to:

a. Prefer continued or adaptive use of historic buildings and structures to new construction by accurately analyzing the life-cycle benefits and costs of sustainable or adaptive reuse.

b. Employ innovative technical and design practices to facilitate mission use of historic buildings and structures with the minimum loss of historic integrity.

c. Prefer partnerships with government, public, and private organizations to promote local economic development and vitality through use of historic properties in a manner that contributes to the long-term preservation and productive use of those properties in lieu of demolition.

d. Consider systematic deconstruction and architectural salvage of historic building fabric when demolition is necessary, especially where historic fabric may be reused to preserve other similar properties in the inventory.

8206. ANNUAL REPORTING AND METRICS. The Marine Corps is responsible for responding to various data calls and asset management inventories on an annual basis. Responses to data calls may include input of data by installation CRMs into DON databases (e.g., INFADS heritage asset codes), or responses via phone or email to HQMC personnel. In order to ensure accurate reporting of assets and asset status each year, installations must maintain records of their responses to each data call, labeled with the fiscal year of the response, and including any supporting information to explicate their responses, in a file accessible to their supervisors or to the HQMC Cultural Resources Specialist.

CHAPTER 8

CULTURAL RESOURCES MANAGEMENT

SECTION 3: RESPONSIBILITIES

8300. CMC (LF)/COMMANDER MCICOM

1. Establish a cultural resources management program and promulgate guidelines and attendant responsibilities.
2. Designate a qualified staff person to serve as the Marine Corps Deputy FPO and representative on the DOD Historic Preservation Working Group.
3. Coordinate with the Deputy Under Secretary of Defense, Environmental Security, DOD Components, DOI, ACHP, and the National Conference of SHPOs in matters related to cultural resources management.
4. Identify Marine Corps-wide priorities and allocate centrally-managed funds that may be used for cultural resources management. Maintain cost records of inventory and treatment of cultural resources.
5. Maintain Marine Corps procedural and policy-making expertise for inter-agency coordination and other aspects of compliance with preservation legislation; assist in resolving disputes with Federal, state, local, and foreign regulatory agencies.
6. Forward NRHP nominations to the Office of the ASN (I&E), and the Keeper of the NRHP.
7. Respond to congressional and other inquiries to satisfy OSD reporting requirements.
8. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, state, local, and overseas historic and archaeological resource requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
9. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to cultural resources statutes and regulations.

8301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Program, budget, and allocate funds for qualified staffing, training, surveys, plans, curation, and studies to facilitate the identification, evaluation, inventory, planning, maintenance, and protection of historic properties and other cultural resources at installations under their cognizance.
2. Develop, sign, and implement an ICRMP for all installation lands and waters that contain cultural resources, and integrate the ICRMP with other installation planning documents and routine procedures applicable to activity projects and programs. Use of a base order to implement the ICRMP is recommended.

3. Coordinate among subordinate and tenant activities to achieve maximum efficiency regarding compliance with cultural resources management requirements within the region.
4. Provide for the professional identification, evaluation, inventory, nomination, and protection of cultural resources under their control and ensure that the appropriate data management systems, including spatial data systems, accurately reflect the eligibility status of such resources.
5. Follow all legally-mandated procedures if historic properties (as defined under reference (a)) are to be transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.
6. Consult or coordinate with the SHPO and other consulting parties, interested groups and individuals as required under reference (c) (or reference (t) for overseas installations), sections 106 and 402 of reference (a) and reference (f) when proposed actions have the potential to effect cultural resources. When appropriate or in the interests of BMPs, enter into agreements to facilitate consultation and establish consultation protocols or response procedures. Neglecting to consult with these interested parties early in the planning process could result in unnecessary tension, which will cause delays that translate into government time and cost.
7. Consult with American Indian tribes and NHOs prior to any Marine Corps action that might impact American Indian tribal or Native Hawaiian interests as defined by applicable laws and regulations, including planned excavation and inadvertent discovery provisions in accordance with reference (d).
8. Ensure that inadvertently discovered archaeological resources, human remains, or cultural items (as defined per reference (d)) are protected at the site of discovery until cultural resource professionals evaluate the resources' significance and make recommendations regarding protection or recovery. Ensure that the chain of command is kept informed.
9. Whenever practical, use historic buildings instead of new acquisition, construction, or leasing to satisfy mission requirements.
10. Ensure that funds budgeted for historic preservation are applied to NRHP resources.
11. Provide for storage and professional curation of salvaged archaeological resources and records that result from compliance actions.
12. Take appropriate action on archaeological permit requests. Review requests for permits to allow the excavation and removal of archaeological resources from Marine Corps lands.
13. Provide for the identification and repatriation of Native American remains and associated cultural items in accordance with reference (d) and other implementing regulations issued by the DOI.
14. Allow American Indians, Native Hawaiians, and host nation cultural practitioners access to sites and resources that are of religious importance or that are important to the continuance of their cultures, as consistent with the military mission, the American Indian Religious Freedom Act, and

other appropriate laws and regulations subject to the same considerations as the general public.

15. When warranted by the presence of cultural resources, designate a staff person to serve as CRM. CRMs should be provided with adequate training to ensure that they have a full understanding of their position duties and can provide adequate guidance on compliance with cultural laws and regulations to other stakeholders.

8302. CRM

1. Provide day-to-day management for cultural resources at the installation level, help ensure that all installation activities are in compliance with applicable cultural resources requirements, serve as a liaison between all persons involved in the ICRMP, write the ICRMP or develop its statement of work, and implement the ICRMP.

2. Understand the military mission and have a clear understanding of how their job supports the military mission.

3. Locate, inventory, evaluate, and protect historic buildings; structures; districts; archaeological sites; resources of traditional, religious, or cultural significance to American Indian tribes or NHOs; properties listed on the World Heritage List or host nation equivalent to the NRHP, and other cultural resources in accordance with Marine Corps policy and Federal statutes and regulations. If survey and evaluation tasks are contracted to cultural resources professionals, prepare statements of work, monitor work progress, and review all work products prior to submission to external stakeholders.

4. Disseminate technical guidance regarding maintenance, storage, and protection of cultural resources to installation personnel whose actions have the potential to affect cultural resources.

5. Coordinate the maintenance of cultural resources records in the appropriate data management systems, to assure that accurate information regarding Marine Corps cultural resources can be provided to Congress, the Marine Corps Deputy FPO, and other interested parties when required.

6. As the CG/CO's delegated representative, coordinate and consult with outside entities including the SHPO, American Indian tribes and NHOs, and local interest groups, as mandated in references (a), (c), (d), (g), (z), and other laws and regulations listed in paragraph 8103 of this chapter.

REFERENCES

- (a) 16 U.S.C. 470-470x
- (b) Executive Order 13287, "Preserve America," March 3, 2003
- (c) 42 U.S.C. 4321
- (d) 25 U.S.C. 3001-3013
- (e) DOD Instruction 4715.16, "Cultural Resources Management," September 18, 2008
- (f) FGS as developed by Lead Environmental Components for each country with significant DOD installations  
(<https://www.denix.osd.mil/denix/DOD/Library/Intl/FGS/final-gov-stds-DOD.html>)
- (g) 16 U.S.C. 470aa-mm
- (h) 36 CFR 800
- (i) 36 CFR 79
- (j) SECNAV M-5210.1
- (k) Department of Interior, NPS-28 "Cultural Resource Management Guidelines," August 16, 2002
- (l) Executive Order 11593, "Protection and Enhancement of the Cultural Environment," May 13, 1971
- (m) 43 U.S.C. 1601-1629h
- (n) 36 CFR 60
- (o) Executive Order 13327, "Federal Real Property Asset Management," February 5, 2004
- (p) 32 CFR 229
- (q) 43 CFR 10
- (r) 36 CFR 61
- (s) 5 U.S.C. 552
- (t) Environmental Effects Abroad of Major Department of Defense Actions 32 CFR 187
- (u) MCO 11000.25
- (v) 36 CFR 62

- (w) Executive Order 13007, "Indian Sacred Sites," May 24, 1996
- (x) Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," November 6, 2000
- (y) Presidential Memorandum, "Government-to-Government Relations with Native American Tribal Governments," April 29, 1994
- (z) DOD Instruction 4710.02, "DOD Interactions with Federally-Recognized Tribes," September 14, 2006
- (aa) "Department of Defense American Indian and Alaska Native Policy (Annotated)," October 20, 1998
- (ab) Department of the Interior, NPS Publication, "Guiding Principles of Sustainable Design," December 15, 1994

CHAPTER 9

HAZARDOUS WASTE (HW) MANAGEMENT

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## CHAPTER 9

### HAZARDOUS WASTE (HW) MANAGEMENT

#### SECTION 1: INTRODUCTION

9100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory and regulatory requirements for HW management. Requirements for HM and HS spills are discussed in chapter 7 of this Manual. Chapter 21 of this Manual provides specific information on the requirements for waste military munitions (WMM).

9101. APPLICABILITY. See paragraph 1101.

9102. BACKGROUND. Reference (a) was enacted in 1976 as an amendment to reference (b). Reference (a) has since been amended by several statutes, including references (c), (d), and (e). The objectives of reference (a) are to assist state and local agencies in the development of solid waste (SW) management plans; prohibit open dumping on the land and require the conversion of existing open dumps to facilities that do not pose a danger to the environment or to human health; and ensure that HW management practices protect human health and the environment. Reference (a) provides for the "cradle-to-grave" tracking of HW from generator to storage, treatment, and ultimate disposal.

1. The EPA may delegate authority to a state to manage a RCRA program in lieu of all or part of the Federal HW program.
2. In a state that has final EPA authorization to manage a RCRA program, all installations generating HW are subject to the state program in lieu of the Federal HW program. Therefore, many of the Federal regulatory requirements set forth in this chapter may not be directly applicable to installation HW management activities.
3. Reference (d) waived sovereign immunity under RCRA; therefore, the Marine Corps is subject to civil and administrative fines and penalties levied by Federal, state, and local regulators. Full discussion of reference (d) is presented in paragraph 9103.2.

#### 9103. FEDERAL STATUTES

##### 1. RCRA of 1976 (42 U.S.C. 6901 et seq.)

a. Subtitle C: HW Management. Provides the statutory basis for EPA to promulgate the regulations contained at 40 CFR parts 260 - 279. The major topics covered in subtitle C are discussed briefly below.

(1) Section 6921: Identification and Listing of HW. Tasks EPA with developing criteria for identifying the characteristics of HW and for listing HW. Properties taken into account are toxicity, persistence, and degradability in nature, potential for accumulation in tissue, reactivity, ignitability, corrosiveness, and other characteristics that make a substance hazardous (40 CFR part 261 subparts A through D).

(2) Section 6922: Standards Applicable to Generators of HW.

Establishes standards for HW generators as necessary to protect human health and the environment. The standards cover HW labeling, containerization and accumulation time, information on the chemical composition of HW, the manifest system, establishing a HW minimization program, and reporting to authorities the quantities and types of HW generated (40 CFR part 262 subparts A through D).

(3) Section 6923: Standards Applicable to Transporters of HW.

Establishes the standards applicable to transporters of HW. These include requirements for HW recordkeeping for transport of HW to be picked up from, and transported to, the proper locations according to the manifest documents; to be properly labeled and containerized for shipment; and for Hazardous Material Transportation Act (HMTA) requirements to be met, as specified by the DOT (49 CFR Subchapter C, Hazardous Materials Regulations) (40 CFR part 263).

(4) Section 6924: Standards Applicable to Owners and Operators of HW TSDFs. Covers various topics areas, which are expanded in the HSWA, Federal Facilities Compliance Act (FFCA), and the Land Disposal Program Flexibility Act of 1996 (section 1 of Public Law 104-119, 26 March, 1996). Topics in this section that are pertinent to the Marine Corps include:

(a) Section 6924(a) requires set performance standards for new and existing TSDFs, including recordkeeping; reporting; manifests; the location, design, and construction of TSDFs; operating and maintenance practices; contingency planning; and permitting (40 CFR part 264 and 40 CFR part 265).

(b) Owners and operators of all HW facilities must have a contingency plan for their facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of HW or HW constituents to air, soil, or surface water (40 CFR part 265.50).

(c) Section 6924(c), added by the HSWA, prohibits the land disposal of bulk or non-containerized liquid HW or free liquids contained in HW (40 CFR parts 264 and 265).

(d) Sections 6924(d) - 6924(g), added by the HSWA, establish periods and procedures for EPA to prohibit the land disposal of specific HWs (40 CFR part 268).

(e) Section 6924(m), added by the HSWA, requires EPA to develop treatment standards for those HWs prohibited from land disposal (40 CFR part 268).

(f) Section 6924(n), requires EPA to establish air emissions monitoring and control regulations for TSDFs (40 CFR parts 264 and 265).

(g) Sections 6924(u) and 6924(v), establishes the RCRA Corrective Action program for the cleanup of continuing releases, even if beyond the facility property line, from solid waste management units (SWMUs) at TSDFs,

regardless of when the releases occur (40 CFR part 264, subpart F and 40 CFR part 270).

(h) Section 6924(y), added by the FFCA and requires EPA in conjunction with the DOD to develop regulations for identifying when military munitions become HW (40 CFR part 266) (see chapter 21 of this Manual).

(5) Section 6925: Permits for Treatment, Storage, or Disposal of HW. Requires all owners or operators of existing or planned HW TSDFs to apply for and receive a RCRA permit prior to continuing or beginning operations. This section includes provisions for existing facilities to continue operation under interim status, as well as specific requirements for each type of TSDF, including landfills, surface impoundments, and waste piles (40 CFR part 270).

(6) Section 6926: Authorized State HW Programs. This provision allows states to administer and enforce their own HW management programs as long as their HW management requirements are at least as stringent as those of the Federal program. Prior to implementing a HW program, each state must obtain written authorization from the cognizant EPA region (40 CFR part 271). Irrespective of EPA-delegated obtained HW authority, state HW procedures, including the requirement to obtain state permits, are applicable to Marine Corps facilities under the FFCA.

(7) Section 6927: Inspections. Establishes EPA and state access authority to facility premises and all records regarding HW management. It requires that EPA or the authorized state inspect all permitted HW TSDFs no less than once every two years. This section also includes provisions for the public availability of all records concerning HW management, unless they are confidential in nature (as defined by 18 U.S.C. 1905) (40 CFR § 271.15) (FFCA section 107).

(8) Section 6928: Federal Enforcement. Outlines the methods, means, and tools for the EPA to enforce RCRA. It includes policies and guidelines for issuing EAs such as NOVs, compliance orders, public hearings, criminal and civil penalties, knowing endangerment, and interim status corrective action orders (40 CFR § 271.16).

(9) Section 6930: Preliminary Notification. Requires all parties that generate, transport, or recycle HW to notify EPA of their activities. Respondents must submit the information required by following EPA requirements. Parties that have current EPA identification numbers also must file a subsequent notification for items that have changed at their facility.

(10) Section 6933: HW Site Inventory. Requires that each Federal Agency submit to EPA every two years an inventory of the areas it owns or operates, or previously owned or operated, where HW is or was stored, treated, or disposed of at any time (40 CFR 271.15).

(11) Section 6939d: Public Vessels. States that HW generated on a public vessel (owned or chartered and operated by the United States) is not subject to RCRA requirements until transferred to an installation unless the waste is stored for more than 90 days or is stored, after being transferred to another vessel, for more than 90 days (OPNAVINST 5090.1C).

(12) Section 6939e: Federally-Owned Treatment Works. It is unlawful to introduce any HW into a Federally-owned treatment works facility.

(13) Section 6961: Application of Federal, State, and Local Law to Federal Facilities. This section is a comprehensive waiver of sovereign immunity from the applicability of RCRA to Federal facilities. This waiver was broadened further by the FFCA. Therefore, the requirements of RCRA generally apply to Federal installations in the same manner as they would to any nongovernmental entity. The President may also generally exempt, for up to one year, any SW management facility of any department from compliance with a RCRA requirement if the exemption is in the paramount interest of the United States.

(14) Section 6962: Federal Procurement. States that each procuring agency must select those items made of the highest percentage of recovered materials practicable, unless such items are unreasonable, fail to meet performance standards, or are only available at an unreasonable price. This section requires EPA to issue Comprehensive Procurement Guidelines that list designated items that are, or can be, made with recovered materials. This section and the Farm Bill require Federal agencies to have "Reference Programs" to acquire recycled content and bio-based products where they are cost effective and meet technical requirements. For more information on procurement of recovered materials, see chapters 15 and 17 of this Manual.

(15) Section 6963: Cooperation with EPA. This section states that Federal agencies must make available all information required by the EPA Administrator concerning past or present waste management practices and past or presently owned, leased, or operated SW or HW facilities. This includes the information on the market potential of energy and materials recovered from SW.

(16) Section 6964: Applicability of Solid Waste Disposal Guidance to Executive Agencies. States that executive agencies must comply with SW management regulations when the agency:

(a) Has jurisdiction over the real property or the operation of a facility that is involved in SW management.

(b) Generates SW, the management of which, if conducted by a person other than the agency, would require a permit or license for disposal of the waste (see chapter 17 of this Manual).

b. Subtitle I: Regulation of USTs. Directs EPA to promulgate standards for the management, control, and closure of USTs used to store petroleum products or HSs. The Subtitle objective is to prevent and clean up releases from USTs (40 CFR 280) (see chapter 18 of this Manual).

## 2. FFCA of 1992 (Public Law 102-386)

a. General. The FFCA amended several sections of the Solid Waste Disposal Act (SWDA) (as amended by RCRA).

b. Section 102. Amends section 6001 of the SWDA by:

(1) Waiving governmental immunity and subjecting Federal agencies to civil and administrative fines and penalties, regardless of whether the fines or penalties are punitive or coercive in nature.

(2) Requiring payment of any nondiscriminatory service charges (e.g., assessments in connection with the processing and issuance of permits; amendments to permits; review of plans, studies, and other documents; and inspecting and monitoring facilities) that are assessed in connection with a Federal, state, or local SW or HW regulatory program.

(3) Exempting agents, employees, and officers of the United States from personal liability for any civil penalty arising from acts or omissions within the scope of his or her official duties.

(4) Allowing agents, employees, and officers of the United States to be subject to any criminal sanctions under the Federal or state HW law, but no department or agency shall be subject to any such criminal sanctions.

c. Section 104. Amends section 3007 of the SWDA by requiring EPA and/or states to conduct annual inspections of each Federal facility for HW program compliance on a cost-reimbursable basis. It also requires Federal facilities to conduct comprehensive groundwater monitoring evaluations where such an evaluation has not been conducted within the one year preceding the FFCA. Groundwater monitoring initiated under CERCLA is specifically excluded from this requirement.

d. Section 106. Added to the SWDA as section 3022 and states that any HW generated on a public vessel is not subject to the storage, manifest, inspection, or recordkeeping requirements until the HW is transferred to an installation.

e. Section 107. Added to the SWDA as section 3004(y) and requires EPA, in consultation with the DOD, to propose and adopt regulations identifying when military munitions (both chemical and conventional) become HWs. It also requires EPA and the DOD to provide for the safe storage, transportation, and disposal of such wastes. See chapter 21 of this Manual.

f. Section 108. Added to the SWDA as section 3023, which provides Federally Owned Treatment Works (FOTW) with the same sewage exclusion from HW regulation as afforded to Publicly Owned Treatment Works (POTWs). For the exclusion to apply, the wastes received by the FOTW must either meet certain CWA pretreatment conditions and must comply with LDRs, or must be generated by households or by a person generating less than 100 kilograms (kg) of HW per month.

3. HMTA of 1975 (49 U.S.C. 5101 et seq.). The HMTA is administered by the DOT and regulates the shipping, marking, labeling, placarding, and recordkeeping requirements for HMs, including HWs and military munitions. 49 CFR parts 100 - 199 describes these regulations.

4. Land Disposal Program Flexibility Act of 1996. Amended two RCRA programs, the LDR program and the non-hazardous landfill groundwater monitoring program. This act exempts HW from RCRA requirements, if the HW is

treated to a point where it no longer is characteristic of a HW and is disposed in a deep injection well under the Safe Drinking Water Act (SDWA).

9104. FEDERAL REQUIREMENTS

1. HW Management

a. General. Any installation that generates, transports, treats, stores, or disposes of HW or produces, burns, distributes, or markets any HW-derived fuels, must notify the cognizant EPA office of its activities and comply with reference (a) and/or the authorized state HW program (chapter 15-4.1 in reference (f)).

(1) Upon presenting proper credentials, Federal and state agency officials with responsibility over the HW programs will be allowed reasonable access to Marine Corps installations to perform their inspection and oversight duties, but inadequately cleared personnel must not be allowed access to classified areas until a proper security clearance is obtained.

(2) The installation environmental office will maintain and forward records and reports as required to Federal, state, or local agencies with responsibility over the HW program.

(3) Military munitions are subject to the RCRA HW requirements of this chapter when they have been determined to be HW military munitions (HW military munitions) (see chapter 21 of this Manual). In conjunction with the requirements of this chapter, generators of WMM shall reference chapter 21 of this Manual for policy and other matters pertaining to the use, handling, storage, and transportation of HW military munitions.

b. Hazardous Waste Management Plans (HWMP). Section F in chapter 10 of reference (g) and section 15-5.3 in reference (f), direct each installation to develop a HWMP, which includes input from the Marine Corps commands/units and tenants on the installation. This plan identifies and implements HW management actions required by reference (a) and/or by authorized state HW programs and provides the procedures and responsibilities on how to properly manage HW. The plan will be signed by the installation CG/CO and distributed to all personnel (including all Marine Corps commands/units and tenants) who accumulate, generate, transport (including on-installation transportation), treat, store, or dispose of HW for their compliance. The plan must be reviewed and updated whenever installation/facility conditions or operations affecting HW accumulation, generation, transportation, treatment, storage, or disposal change. The plan must include, at a minimum, the following:

(1) A list of EPA/state identification numbers for generating, transporting, storing, treating, or disposing of HW as applicable.

(2) Names of persons authorized by the CG/CO in writing to sign HW manifests.

(3) Procedures and responsibilities for the installation, Marine Corps commands/units and tenants, and personnel for generating, transporting, storing, treating, or disposing of HW. Such procedures include maintaining

written job titles and job descriptions of each person conducting HW management activities at each HW facility.

(4) Procedures to ensure that HW remains at a 90-day accumulation area for no more than 90 days.

(5) For each activity that generates HW, the type and average quantity of HW for each activity generating HW to include all Marine Corps commands/units and tenant activities.

(6) A description of waste minimization and source reduction projects, funds available for such projects, and goals to reduce the use of toxic and hazardous chemicals and materials that generate HW and to purchase lower risk chemicals and toxic materials from top priority lists (reference (h)).

(7) The location of all HW accumulation areas (including satellite areas) and TSDFs.

(8) A waste analysis plan developed in accordance with section 13(b) in reference (i), as applicable.

(9) Procedures for self-inspecting HW accumulation areas and TSDFs. Such inspections shall address all HW activities at the areas and/or facilities inspected, including, but not limited to, whether containers are closed, containers are marked to indicate content and accumulation start date, and self-inspection records are maintained.

(10) Procedures to prevent unauthorized access to HW accumulation areas (including satellite accumulation areas and HW military munitions storage areas granted conditional exemption (CE)) and TSDFs.

(11) Procedures to temporarily treat, store, or dispose of HW if existing facilities are not available.

(12) References and installation POCs for obtaining information on HW management and POCs for EPA and state officials administering the HW program.

(13) A description of the training program to ensure that all applicable personnel are instructed in Federal, state, local, and Marine Corps requirements for HW management. The description shall include provisions for ensuring that all HW management personnel have received introductory and refresher training and that all training records are properly documented and maintained.

(14) The Spill Control and Contingency Plan or Oil and Hazardous Substances Spill Control and Contingency Plans, or references to these plans.

(15) A section on the management of HW military munitions to include management of emergency responses to explosives or munitions emergencies.

(16) A section on waste stream management to include, but not limited to, universal wastes, used oil, fluorescent light tubes, asbestos,

absorbents, empty HM/HW containers, and HW minimization.

(17) A closure plan for HW TSDFs, including ammunition supply points under a CE for HW military munitions storage. The closure plan should discuss how 90-day accumulation areas will meet the closure standards of sections 111 and 114 of reference (j). If the TSDF is permitted, it must include a closure plan for all HW management units. If the facility has interim status and closes before being fully permitted, 90-day accumulation areas must comply with closure requirements in section 34 of reference (k).

c. Identification of HW. Federal regulations state that a waste is considered a HW if: it is a listed HW; it exhibits at least one of four HW characteristics; it is a military munitions designated as HW by the Designated Disposition Authority (DDA); and/or it is a military munitions considered HW by regulation. Listed wastes, characteristic wastes, and HW military munitions are categorized using applicable EPA/state HW identification numbers. When identifying HW also consult state and local regulations. States must adopt a list of HW and characteristics for identifying HW that are equivalent to EPA's list (reference (l)).

(1) Listed HWs are located in several sections within reference (m) and are categorized into the following EPA HW numbers:

(a) F Wastes (section 31 of reference (m)). Identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations and includes non-source specific waste.

(b) K Wastes (section 32 of reference (m)). Includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing and includes source-specific waste.

(c) P Wastes (section 33 of reference (m)). Includes specific commercial chemical products in an unused form including acutely hazardous discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.

(d) U Wastes (section 33 of reference (m)). Includes specific commercial chemical products in an unused form including toxic discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.

(2) Characteristic HWs are designated as EPA waste numbers beginning with the letter "D" and are described in sections 20 through 24 of reference (m). They are identified as follows:

(a) Ignitable Wastes (D001) (section 21 of reference (m)). Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 deg.C (140 deg.F) (e.g., waste oils and used solvents).

(b) Corrosive Wastes (D002) (section 22 of reference (m)). Corrosive wastes are acids or bases (pH less than or equal to 2, or greater

than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels (e.g., battery acid).

(c) Reactive Wastes (D003) (section 23 of reference (m)).

Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors, when heated, compressed, or mixed with water and have the following properties:

1. Unstable and readily undergoes violent change without detonating.

2. Reacts violently with water.

3. Forms potentially explosive mixtures with water.

4. Generates toxic gases when mixed with water.

5. Cyanide- or sulfide-bearing and capable of generating toxic gases when exposed to pH conditions between 2 and 12.5.

6. Capable of detonation or an explosive reaction when exposed to a strong initiating force or when heated under confinement.

7. Capable of detonation or an explosive decomposition reaction in normal room conditions.

8. A forbidden explosive as defined in section 53 of reference (n) or a Class A explosive (section 53 of reference (n)) or a Class B explosive (section 88 of reference (n)).

(d) Toxic Wastes (D004 - D043) (section 24 in reference (m)) (chapter 15 in reference (f)). Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead) and when land disposed may leach into the groundwater. Toxicity is defined through the Toxicity Characteristic Leaching Procedure (Method 1311). Section 24 in reference (m) describes the list of contaminants, allowable levels, and corresponding D Waste numbers.

(3) Emission residues from air pollution control equipment and biosolids from wastewater treatment plants may display HW characteristics; therefore, these residues and biosolids must be evaluated to determine whether they are HW and, if so, they must be managed appropriately. Toxicity is the most common characteristic of these residues and biosolids.

(4) Several pesticides exhibit toxic waste characteristics; therefore, the installations need to identify whether the waste pesticides and pesticide waste products (e.g., containers, rinsate) are HW, or meet the definition of a Universal Waste per section 9 in reference (m) and chapter 15-3.5 in reference (f). If so, these wastes must be disposed of and managed as HW.

(5) Mixtures of a non-HW and listed HW are also considered HW and must be managed appropriately. An example of such a mixture is 1,1,1-

trichloroethane (TCA) mixed with used oil. Because TCA is listed at reference (m), the entire mixture becomes HW.

(6) Mixtures of a non-HW and a characteristic HW are regulated as HW only if the entire mixture exhibits one of the four hazardous characteristics.

(7) Wastes derived from the treatment, storage, or disposal of listed HW (except precipitation run-off) are HW. Examples of these "derived from" HW include biosolids, spill residue, ash, emission control dust, or leachate produced as a result of managing HW. These wastes must be managed as HW.

(8) Wastes that are either mixtures of characteristic HW and non-HWs or derived from the treatment, storage, or disposal of characteristic HW are not considered HW if they no longer exhibit one of the four HW characteristics. This exemption applies only to characteristic HW; listed HW, either mixed or derived from managing HW, are still HW.

(9) Low-Level Mixed Waste (LLMW) is a mixture of HW and low-level radioactive waste. LLMW stored and treated in approved tanks or containers is exempt from regulation as HW under RCRA authority as long as the management of such waste is regulated by the Nuclear Regulatory Commission. LLMW that is not managed under this Commission's authority or not treated or stored in tanks or containers is still regulated as a RCRA HW (subpart N of reference (o)).

(10) Due to the regulations summarized above, it is extremely important to segregate waste streams, both hazardous and nonhazardous, to avoid the added expense of managing HW when it can be avoided through proper segregation. Segregation of these waste streams is beneficial, resulting in volume reduction, cost savings for disposal, and avoidance of unnecessary recordkeeping (chapter 15-5.2 in reference (f), and references (p), and (q)).

d. Generation of HW

(1) Monthly generation rates, accumulation times, and accumulation quantities for HW generators are established at references (m) and (k) and chapter 15-3.3 in reference (f). The requirements are summarized as follows:

(a) Conditionally Exempt Small Quantity Generators (CESQGs) must generate no more than 100 kg (220.46 pounds (lb)) of HW and less than 1 kg (2.20 lb) of acute HW per month and must accumulate no more than 1,000 kg (2204.62 lb) of HW on-site at any given time. CESQGs are exempt from all of the HW management regulations, except HW identification and disposal requirements. A log book is required as part of the site's operating record to document waste generation and defend this generator status.

(b) Small Quantity Generators (SQGs) generate greater than 100 kg (220.46 lb) and less than 1,000 kg (2204.62 lb) of HW per month and accumulate no more than 6,000 kg (13,228 lb) of HW onsite at any given time. SQGs are subject to limited HW management regulations, which include obtaining an identification number from EPA or the authorized state, properly maintaining HW storage containers and tanks, using the most recent EPA form

to ship wastes off site, limiting on-site accumulation to 180 days (270 days if the waste has to be shipped more than 200 miles (321.87 kilometers), and properly disposing of HW.

(c) Large Quantity Generators (LQGs) generate 1,000 kg (2204.62 lb) or more of HW per month. LQGs are subject to more stringent HW management regulations.

(2) If any of the generation quantities outlined in paragraphs 9104.1d(1)(a) and 9104.1d(1)(b) above, are exceeded, then the generator is considered to be an LQG and is subject to more stringent HW management regulations. If any of the accumulation quantities or periods outlined in paragraphs 9104.1d(1)(a) through 9104.1d(1)(c) are exceeded, then the generator is the operator of a storage facility and must apply for a RCRA part B permit to remain in operation.

(3) Before offering HW for transport off site, the HW generator must ensure that all DOT requirements for labeling, marking, placarding, and containerizing are met. The HW generator must also ensure that the transporter has obtained an EPA identification number for the transportation of HW and that a Uniform Hazardous Waste Manifest (or state equivalent) accompanies each shipment. Please refer to section 9104.k below for reporting and record keeping requirements regarding manifest and HW generation.

(4) Transportation of HW military munitions must be accompanied by DOD shipping controls applicable to the transport of military munitions in accord with reference (r) and chapter 21, paragraph 21104.3, of this Manual.

(5) Generators must send their HW to permitted TSDFs that comply with HW regulations. Generators must certify that the facility selected to receive the waste employs the most practical and current treatment, storage, or disposal methods for minimizing present and future threats to human health and the environment. The Defense Reutilization and Marketing Service (DRMS) and their local Defense Reutilization Marketing Offices (DRMOs) usually perform this function for DOD generators.

(6) The DRMS is responsible for the disposal of HW for the DOD in accordance with reference (s). Use of DRMS services is the preferred method of disposal. A decision not to use DRMS for HW disposal may be made in accordance with reference (t) for best accomplishment of the installation mission, and shall be concurred with by the component chain of command to ensure that installation contracts and disposal criteria are at least as stringent as criteria used by the DRMS. The DRMS should be first afforded the opportunity to redress any operational difficulties in providing service. The DRMS may request information from the military services, to include lists of facilities doing their own HW disposal contracting, including the type of commodities handled and prices paid (reference (g)). For the disposal of HW generated from an installation's routine operations, generators must coordinate with the DRMS or DRMO to ensure that transporters are on the approved DOD list and that these transporters are permitted for "cradle to grave" management of HW. For cleanup operations, installations should coordinate with EPA, the states (with authorized HW programs), and the Corps of Engineers to ensure transporters are in compliance with all applicable regulations. Questions on this process should be addressed to the local DRMO

or DRMS (see appendix J for procedures for disposal of HW when not using the DRMO and/or DRMS).

(7) For HW military munitions, the DDA will provide disposition instructions, which will include the appropriate disposal facility. See chapter 21 of this Manual.

(8) Generators must certify that they have developed and implemented waste minimization programs at their areas as part of the HW manifest requirements. Additionally, the generator must certify that these programs are capable of reducing the volume, quantity, and toxicity of the generator's waste as a part of their biennial report. Waste minimization reporting is also required by section 6607 of reference (u), as it amended section 313 of reference (v). For HW military munitions, the goals of HW minimization have been incorporated into the Marine Corps military munitions disposition process, chapter 21, paragraph 21201.

(9) EPA has promulgated LDRs limiting or prohibiting the land disposal of certain HWs by specific dates. Treatment standards for each waste were also set to substantially reduce the toxicity or likelihood of HW migration. Wastes that meet the treatment standards, or for which there will be no migration of hazardous constituents for as long as the wastes remain hazardous, may be land disposed. reference (w) lists the specific HWs prohibited from land disposal and the effective dates of the prohibitions. Generators of HW must take the following steps to ensure that the requirements of the LDRs are met:

(a) Determine if the waste is a solvent containing HW or a dioxin-containing waste, listed on the California Waste List, or identified as a Third Third waste (reference (x)). Third Third wastes may continue to be disposed of if LDR treatment standards have been met.

(b) If the HW is restricted and does not meet the established treatment standard, a written notice must accompany each shipment of the waste, notifying the TSDF of the appropriate treatment standards that must be met before land disposal of the HW can take place.

(c) If the HW is restricted and meets the established treatment standards, a written certification of this fact must accompany each shipment of the waste to the TSDF. In this case, further treatment of the HW is not required prior to land disposal.

(d) If restricted HWs are being treated onsite to meet the established treatment standards, a written waste analysis plan must be developed describing the procedures used to comply with the treatment standards. The plan must be filed with EPA or authorized state at least 30 days prior to commencing the on-site treatment process.

(e) Records of all notices, certifications, demonstrations, waste analysis data, and other documentation produced to satisfy the LDR requirements must be kept on-site for three years after the date the HW was sent to a TSDF. (section 7(a)(8) of reference (w)). These records must be retained per reference (y), SSIC 5090.2b.

e. Transportation of HW

(1) The Marine Corps normally contracts, via the DRMS, with private transporters to ship HW off site for recycling, treatment, storage, or disposal. The Marine Corps generator and DRMS are responsible for ensuring that the transporter meets all Federal, state, and/or local HW transportation regulations and all explosives safety requirements, as applicable.

(2) Reference (q) provides policies, procedures, and responsibilities for receipt, storage, transportation, and handling of HMs and HWs. This document is published by the Marine Corps, DLA, and the other military services. The provisions in reference (q) are applicable to all installations under the command and control of the SECDEF.

(3) Transport of HW on a public or private right-of-way that is within or alongside the boundary of an installation does not require a RCRA HW manifest. State and local regulations concerning the transportation of HW on a public roadway within or adjacent to an installation boundary may be more stringent than reference (k) and may require the use of a manifest. In the event of release of HW on a public or private right-of-way, then the transporters must meet the requirements of sections 30 and 31 of reference (z) for immediate action and cleanup.

f. Treatment, Storage, and Disposal Facilities

(1) TSDFs are facilities on installations that conduct HW treatment, storage, or disposal operations. TSDFs require a permit to continue existing operations or to initiate new operations. EPA developed a two-part permitting procedure for TSDFs as outlined in the following two paragraphs (subpart B of reference (aa)).

(2) The part A permit confers interim status on an existing TSDF, allowing the installation to continue operations. Interim status can only be conferred on TSDFs for which construction commenced on or before 19 November 1980. Because the last part A application deadline was 8 November 1988, any TSDFs that do not already have a part A permit must obtain a part B permit before commencing operations.

(3) The part B permit confers final approval to operate TSDFs. The application for the part B permit is detailed, requiring location maps, engineering drawings, operating procedures, waste analysis plans, contingency and ERPs, and other items. The part B application is reviewed and approved by the cognizant regulatory agency (usually the state). After approval, the part B permit must be maintained to reflect accurately the latest operations at the TSDF. Prior to implementing major changes in operations (e.g., new or modified treatment process, the generation of a new type of waste, new or modified storage site), the part B permit must be updated subject to the review and approval of the cognizant regulatory agency (section 14 of reference (aa)).

g. HW Manifest System

(1) The Uniform Hazardous Waste Manifest (EPA Form 8700-22 Rev.3-05)

is the document used to track HW from its generation point to its final disposal destination. Almost all HW transported from an installation over public roads must be accompanied by a manifest prepared and signed by the HW generator. Each transporter and the owner or operator of the facility designated to receive the HW must sign the manifest and keep a record copy. A copy of the signed manifest must then be returned to the HW generator. Please refer to section 9104.k for reporting and record keeping requirements regarding manifest and HW generation (per subparts A through D of reference (k), reference (z), and reference (y), SSIC 5090.2a through 2d.

(2) If the DRMO is managing the disposal of HW for the installation, the HW must be accompanied by the most recent DRMO Disposal Turn-in Document and DRMO HW Profile Sheet, unless a current profile sheet is already on file with the DRMO when the DRMO accepts custody of the HW. The DRMO will then prepare the manifest. The HW generator must review the manifest for accuracy of each entry and sign as the generator. Each person must be authorized in writing to do so by the installation CG/CO.

(3) In addition to fulfilling EPA requirements, installations must include a 24-hour manned duty telephone number in block 15 on each manifest.

(4) WMM being transported under CE (section 203 of reference (o)), must be accompanied by DOD shipping and tracking controls applicable to transportation of military munitions.

h. Accumulation and Storage of HW by LQGs. As stated in paragraphs 9104.1d(1) through (6), the applicability of specific RCRA accumulation and storage requirements depends on the amount of waste that is generated in a calendar month. For LQGs, there are three types of HW accumulation/storage areas: satellite, 90-day, and permitted. The regulatory requirements differ for each type. It is not a requirement to use all three types of areas. For example, HW can be accumulated at a satellite area and later transferred to a permitted storage area. Each installation should set up the appropriate number and type of accumulation and storage areas necessary to manage its HW properly. Paragraphs 9104.1.h(1) through (3) provide a description of the three types of HW accumulation or storage areas and the corresponding regulatory requirements.

(1) Satellite Accumulation Areas. These are areas where HW is at or near the point of generation and under the control of the operator. In order to manage satellite areas effectively and to prevent waste stream contamination, HW container access must be restricted to authorized personnel only. Although not required, it is good practice to place spill control and emergency equipment (e.g., eyewash, fire extinguisher) near a satellite accumulation area. The other requirements for operating a satellite accumulation area are:

(a) Each container must be in good condition, compatible with the HW, and marked with the words "Hazardous Waste" or other words that identify the contents of the container.

(b) Each container must be kept closed at all times except when adding or removing HW.

(c) Generators may accumulate up to 55 gallons (208.20 liters) of HW or one quart (0.94 liter) of acute HW at a satellite area for an indefinite amount of time or in accordance with state regulations. These quantity limits are for the total amount of HW or acute HW at the site, not for each waste stream at the site. For example, 55 gallons (208.20 liters) of one waste stream is allowed. Thirty gallons (136.38 liters) of one waste stream and 25 gallons (113.65 liters) of another waste stream are also allowed. However, 55 gallons (208.20 liters) of one waste stream and 55 gallons (208.20 liters) of another are not allowed.

(d) When 55 gallons of HW (or 1 quart of acute HW) is exceeded, the generator needs to date the container and move the excess waste to a 90-day or 180-day area within three consecutive days of filling the container (section 34(c)(2) of reference (k)). Once the container is moved, the generator needs to date the container again, so that it can be moved off site within 90 or 180 days (sections 34(a)(2) and 34(d)(4) of reference (k)), respectively. However, if the container is moved directly to a permitted or interim status unit it does not need to be re-dated. This means that an LQG has up to 93 days and an SQG has up to 183 days for on-site accumulation time once 55 gallons of HW (or 1 quart of acute HW) has been exceeded at the satellite accumulation area.

(2) 90-day Accumulation. These areas are used to store HW temporarily until it is either manifested and shipped off site for disposal or transferred to a permitted storage facility on-site. HWs at these areas may be accumulated for up to 90 days. (Note: For WMM, storage must also meet the requirements of reference (ab), DOD Ammunition and Explosives Safety Standards, as specified in reference (o) and chapter 21 of this Manual.)

(a) Each container must be in good condition, compatible with the HW, and marked with the words "Hazardous Waste" and the accumulation start date.

(b) Each container must be closed at all times except when adding or removing HW.

(c) The site must be inspected at least weekly for container leaks, deterioration of containers, open containers, and condition of emergency response and spill control equipment.

(d) Containers holding ignitable or reactive waste must be located at least 50 feet (15 meters) from the accumulation site's boundary.

(e) Incompatible wastes must not be placed in the same container, and must meet the requirements of section 17 in reference (j).

(f) Containers holding HW incompatible with other HW or materials accumulated nearby must be separated by a berm, dike, wall, or other device.

(g) Containers with a capacity greater than 26.4 gallons (0.1 cubic meter) and used to store, treat, or dispose of HW must meet the air emission standards of subpart CC of references (i) and (j).

(h) Areas must be maintained, operated, and equipped to meet

preparedness and prevention requirements outlined in subpart C of references (i) and (j).

(i) A contingency plan and emergency procedures must be developed for each site as outlined in subpart D of references (i) and (j).

(j) Personnel responsible for the site must be trained in the proper handling of HW (subpart B of references (i) and (j)).

(k) As part of the effort to minimize the possibility of releases to the environment, secondary containment should be provided for liquid HW stored at these areas.

(l) If the site uses tanks to store HW, then the requirements of subpart J of references (i) and (j) must be met.

(m) If the site uses tanks with a capacity greater than 26.4 gallons (0.1 cubic meter) to store, treat, or dispose of HW, then the air emission standards of subpart CC of references (i) or (j) must be met.

(3) Permitted Storage. This type of storage facility requires a RCRA part B permit. The permitting process is outlined in paragraph 9104.1f. Storage requirements will be specified in the facility's permit.

(4) Disposal of Offsite HW Military Munitions. Some Marine Corps facilities may possess HW disposal permits that do not allow the acceptance of HW generated from off-site facilities (references (i) and (j)). Existing regulations require the submittal and approval of a Class 3 permit modification request before such HW military munitions can be accepted (reference (i), subpart X, Miscellaneous Units).

(5) Storage of HW Military Munitions. WMM being stored under CE (section 205 in reference (o)) must be stored in accordance with reference (ab).

(6) Storage of Cathode Ray Tubes. The storage of electronic equipment with used or broken cathode ray tubes is conditionally excluded from HW requirements per section 39 in reference (m), if they are undergoing recycling. Cathode ray tubes from the installations are handled through the DRMS and DRMO. (See chapter 17 of this Manual).

i. Accumulation and Storage of HW by SQGs. As previously stated, SQGs generate greater than 100 kg (220.46 lb) and less than 1,000 kg (2204.62 lb) of HW per month and accumulate no more than 6,000 kg (13,228 lb) of HW onsite at any time. These criteria apply to the installation as a whole, not to individual accumulation or generation areas. Accumulation and storage requirements for SQGs are comparable to, but not as stringent as, 90-day accumulation areas. Key requirements are:

(1) The accumulation time limit is 180 days, unless the TSDF to which HW will be transported for disposal is greater than 200 miles, in which case the accumulation time is 270 days.

(2) Requirements identified above in paragraph 9104.1h.3(a) through (e) for 90-day accumulation areas must be met.

(3) An emergency coordinator must be onsite or on call at all times.

(4) Preparations for responses to spills and other emergencies must be made, including posting emergency response telephone numbers, providing and identifying locations of fire extinguishers and spill control equipment, and familiarizing all employees with proper waste handling and emergency response procedures appropriate to the site.

j. Accumulation and Storage of HW by CESQGs. CESQGs are not subject to the accumulation and storage requirements of Federal regulations. State requirements, reasonable safety precautions, and requirements for satellite accumulation areas should be considered when establishing accumulation and storage practices on installations that qualify as CESQGs. While there are no labeling requirements for CESQGs, reference (ac) requires that you have labels on all containers. Storage containers should not be leaking, bulging, rusted, or incompatible with the waste stored in them. If a CESQG should treat or dispose of HW onsite, the installation's TSDF must be fully permitted to handle HW; be a facility that uses, reuses, or legitimately recycles the waste (or treats the waste prior to use, reuse, or recycling); and should be a universal waste handler or destination facility subject to the universal waste requirements of reference (ad). However, when the CESQGS has reached the 1,000 kg threshold the time requirements for the SQG become applicable.

k. Reporting and Recordkeeping

(1) LQGs and TSDF owners/operators must submit annual or biennial reports (EPA Form 8700.13 A/B) to the appropriate regional EPA office or cognizant state agency by March 1 of each even-numbered year or at such time as required by the state agency. Report Control Symbol DD-5090-03 has been assigned to this reporting requirement. A copy of each of these reports must be kept for 3 years per reference (y), SSIC 5090.2a. LQG and TSDF owners/operators should check state reporting requirements, which may be more stringent.

(2) If an LQG has not received a return copy of the HW manifest within 35 days after the date the HW was accepted by the initial transporter, the transporter and/or the owner/operator of the TSDF must be contacted to determine the location of the HW and its status. An LQG must provide an immediate exception report to the EPA regional or state regulatory authorities if the TSDF designated to receive the HW has not returned a copy of the manifest with the handwritten signature of the TSDF owner/operator within 45 days after the date the HW was accepted by the initial transporter. A copy of each exception report filed with the EPA or the state authority must be kept at least 3 years after the date of the report (chapter 15-4 in reference (f).) These records must be retained per reference (y), SSIC 5090.2a.

(3) Generators must maintain the following records:

(a) Waste manifests from offsite disposal (signed copies).

(b) Biennial reports to the EPA (LQGs only).

(c) LDR certificates for offsite disposal.

(d) Exception reports for non-receipt of manifest signed by the offsite TSDF.

(e) Lab analyses or other records used to conduct waste determination (profiles).

(f) HW training documentation.

(g) Storage site inspection reports (LQGs only).

(h) Hazardous waste contingency plan (LQGs only).

(4) Additional reports required by state or agency. Generators must maintain an operator record or log to include but not limited to (section 73 in reference (i)):

(a) Description and the quantity of each HW received, and the method and date of treatment, storage, or disposal.

(b) Location of each HW and the quantity at each location.

(c) Monitoring, testing, or analytical data, and corrective action.

(d) Records and results of waste analyses and waste determinations.

(e) Summary reports and details of all incidents

(f) Records and results of inspections.

(5) Records of test results or waste analyses must be kept for 3 years after the date the HW was last manifested off-site per reference (y), SSIC 5090.2b.

(6) Generators and transporters must maintain a log of all HW manifests including type of waste, quantity, shipped to, ship date, received date and who signed the manifest. They must also retain a copy of the signed manifest for 3 years after the date the HW was accepted by the initial transporter per reference (y), SSIC 5090.2c.

(7) Records of all required inspections, including emergency equipment tests, at HW accumulation and storage areas must be kept on-site and maintained for 3 years per reference (y), SSIC 5090.2b.

(8) SQGs are exempt from the requirements listed above in paragraph 9104.1k(1). With regard to exception reporting (paragraph 9104.1k(2)), SQGs have 60 days after the date the HW was accepted by the initial transporter to notify the appropriate regulatory authority. SQGs are encouraged to expend

efforts to determine the location of the HW and its status.

(9) CESQGs are exempt from the requirements listed above in paragraph 9104.1k(1) through (6), provided they do not exceed the HW generation quantities outlined in paragraph 9104.1d(1)(a).

(10) Recordkeeping requirements for HW military munitions are outlined in chapter 21, section 21104, of this Manual.

(11) Copies of all records should be sent to and maintained by the installation environmental office. Such records shall be maintained for a period of 3 years (section 40(c) of reference (k)) and per reference (y), SSIC Code 5090.2a-c.

#### 1. Management of Used Oil

(1) In some states, used oil is considered a HW and must be managed as directed in state regulations.

(2) Non-hazardous used oil that is mixed with polychlorinated biphenyls (PCBs) and exhibit less than 50 ppm PCBs may be managed as RCRA used oil under reference (ae). However, used oil that contains more than 50 ppm PCBs must be managed as a TSCA waste under reference (af) (see chapter 19 of this Manual) and cannot be diluted to reduce the PCB concentration.

(3) Used oil contaminated with HW shall be managed as a HW, unless the generator is a CESQG under reference (m). CESQG HW that has been mixed with used oil in the intent of being recycled (either by burning for energy recovery or other processes) can still be managed as used oil under reference (ae).

(4) Records containing the initial shipment of the oil from the installation must be kept by the personnel who determined that the used oil met the fuel specification. Records must be maintained for 3 years after the shipment per reference (y), SSIC 5090.2c.

#### 2. RCRA Corrective Action

a. A Corrective Action is a Federal program under reference (a) that was issued to address the cleanup at facilities where a release of HW or hazardous constituents into soil, ground water, surface water, or air has occurred. TSDFs are responsible for investigating and, as necessary, cleaning up releases at or from their facilities, regardless of when the releases occurred. EPA or the state will issue a Corrective Action Order to the TSDF if a Corrective Action needs to be conducted. This order contains a schedule, milestones, and cleanup levels and has been either negotiated by the regulators and the facility or imposed by the court.

b. The regulatory authorities for Corrective Action at TSDFs are found in subpart F of reference (i). Corrective Actions at interim status facilities are accomplished under RCRA statutory authorities, not regulatory authorities.

3. Marine Corps/DLA HW Management Interface. Within the DOD, the responsibility for the disposal of HM and HW is split between the military services and the DLA. Reference (g) promulgates consolidated guidance regarding HM and HW disposal. The DLA has been designated the responsible agency for the worldwide disposal of all HM and HW, with the exception of the nine categories of materials described below:

a. Toxicological, biological, radiological, and lethal chemical warfare materials, if required by United States law to be destroyed. Disposal of the byproducts of such materials is the responsibility of the DOD installation with assistance from the DLA.

b. Material that cannot be disposed of in its present form because of military regulations (e.g., controlled medical items and military munitions items requiring demilitarization). This category would include instances when military regulations require the obliteration of all markings that could relate excess material to its operational program. Once the appropriate actions are taken to meet the military regulation, the resulting material could then be disposed of through the DLA.

c. Municipal-type garbage, trash, and refuse, resulting from residential, institutional, commercial, agricultural, and community activities. This material can be disposed of in a state or local permitted municipal SW landfill.

d. Contractor-generated materials that are the contractor's responsibility for disposal under the terms of the contract. The HW identification number holder (normally the installation commander) must maintain appropriate control of these materials or wastes and assure that they are transported and disposed of in compliance with Federal and state requirements.

e. Biosolids resulting from municipal-type wastewater treatment facilities.

f. Biosolids and residues generated as a result of industrial plant processes or operations. Properly identified industrial process biosolids and residues, that are not commingled or a product of an industrial waste treatment facility, are the responsibility of the DLA. The DLA does not accept biosolids and residues from wastewater treatment facilities. The DLA does take biosolids and residues from industrial processes that have not been commingled. For example, biosolids and residues from industrial process "A" must be collected and stored separately from biosolids and residues resulting from industrial process "B." Each process may result in biosolids and residue contamination, but the biosolids and residues from each process must be collected and stored separately.

g. Refuse and other discarded materials that result from mining, dredging, construction, and demolition operations.

h. Unique wastes and residues of a nonrecurring nature generated by research and development experimental programs.

i. Wastes and residues (including contaminated soil) resulting from site cleanups associated with long-term, widespread contamination of the environment. This category includes wastes and residues from installation restoration efforts.

j. On a case-specific basis, the local DRMO may be able to arrange disposal of the above categories of HW. For cleanup operations, installations should coordinate with EPA, the states (with authorized HW programs) and the Corps of Engineers to ensure transporters are in compliance with all applicable regulations. Contact the local DRMO for more information on the availability of this service.

4. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and with Federal, state, interstate, and regional statutory and regulatory environmental requirements.

9105. TERMS AND DEFINITIONS

1. Disposal (per reference (ag)). The discharge, deposit, injection, dumping, spilling, leaking, or placing of any SW or HW into or on any land or water so that such SW or HW, or any constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

2. Disposal Facility (per reference (ag)). A facility or part of a facility at which HW is intentionally placed into or on any land or water, and at which waste will remain after closure.

3. EPA HW Number (per reference (ag)). The number assigned by EPA to each HW listed in subpart D of reference (m), and to each characteristic identified in subpart C of reference (m).

4. EPA Identification Number (per reference (ag)). The number assigned by EPA to each generator, transporter, and TSDF.

5. Generator (per reference (ag)). Any person, by site, whose act or process produces HW identified or listed in reference (m), or whose act first causes a HW to become subject to regulation.

6. HW. Any discarded material (liquid, solid, or gaseous) that because of quantity, concentration, or physical or chemical characteristics may:

a. Cause or significantly contribute to an increase in mortality or in a serious irreversible or incapacitating reversible illness.

b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed, excluding infectious and radioactive waste; if infectious or radioactive wastes are mixed with EPA/state regulated HW, then the mixture remains regulated as a HW. HW does not include HM with an expired shelf life, unless designated as such by a DRMO.

7. HW Management. The systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of HW. The term also includes the reduction of the HW effect on the environment and processes to recover resources from them.

8. Military munitions (Reference (ag)). All ammunition products and components produced or used by, or for, DOD or the U.S. Armed Services for national defense and security, including military munitions under the control of the DOD, the U.S. Coast Guard, the U.S. DOE, and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants; explosives; pyrotechnics; chemical and riot control agents; smokes; and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items; improvised explosive devices; and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under the DOE nuclear weapons program after all required sanitization operations under reference (ah), as amended, have been completed.

9. Treatment (Reference (ag)). Treatment is any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any HW so as to neutralize such waste; or so as to recover energy or material resources from the waste; or so as to render such waste nonhazardous or less hazardous, safer to transport, store, or dispose of, or amenable for recovery or storage, or reduced in volume.

CHAPTER 9

HAZARDOUS WASTE (HW) MANAGEMENT

SECTION 2: MARINE CORPS POLICY

9200. GENERAL. Marine Corps installations and Marine Corps commands/units and tenants in the United States must comply with all applicable Federal, state, and/or local regulatory requirements relating to HW. Compliance with all aspects of an EPA approved state HW management program is deemed to be in compliance with all Federal requirements. If a state has a program that is not approved by EPA, Marine Corps installations and commands/units and tenants in the given state must comply with the most stringent state and Federal program requirements. Overseas Marine Corps bases must comply with HW requirements in reference (ai) or, if they exist, the applicable FGS (e.g. Japanese Environmental Governing Standards (JEGS)).

9201. MARINE CORPS HAZARDOUS WASTE ANNUAL REPORT (HWAR). The HW data is now collected as part of the Environmental Portal (EPR Portal) Calendar Year HW Annual Data Call that replaced the Pollution Prevention Annual Data Summary (P2ADS). HW data for the previous calendar year is due to be submitted via the EPR Portal each year in March to the Naval Facilities Engineering Service Center (NFESC) and to CMC (LF). The Calendar Year HW Annual Data Call tracks the progress in meeting the DOD Measures of Merit SW and HW goals. Specific guidance on the data call is provided annually by NFESC.

9202. HW MINIMIZATION

1. Marine Corps policy is to reduce the quantity of HW disposed of by using the EMH of source reduction, recycling, treatment, and disposal. The highest priority should be placed on reduction of HW generation and recycling. Reduction of HW disposal costs should be considered.

2. Federal and state regulations require all HW generators to certify (on each Uniform HW Manifest) that a program exists to minimize the volume and toxicity of HWs generated, insofar as economically feasible. Marine Corps activities must implement such programs so that they may make such a certification.

3. The Marine Corps achieved our previous goal of 50 percent reduction of HW (by weight) for the five-year period extending from 1988 through 1992, an additional 50 percent reduction for the seven-year period of 1992 through 1998 and an additional 25 percent for the period 1999 through 2006. The long-term Marine Corps goal is to achieve continuous reduction of HW generation through P2 initiatives, BMPs, and Best Demonstrated Available Technology. Employing P2 concepts in addressing HW compliance will help Marine Corps installations achieve these HW reduction goals.

4. In addition to installation efforts, Commander, Marine Corps Systems Command, via the DDA process, is coordinating with CMC (LF) to actively pursue waste minimization of HW military munitions. See chapter 21 of this Manual.

9203. MARINE CORPS AND DLA INTERFACE

1. Installation Management. See appendix J, Waiver of Requirements to Use DRMS, for information on the use of outside sources other than the DLA for HW disposal, if doing so will best accomplish the mission. Marine Corps policy is to use DLA HW disposal services insofar as possible. However, Marine Corps CGs/COs have authority to contract directly for HW disposal if necessary to:

- a. Comply with HW regulations.
- b. Improve efficiency.
- c. Produce economic benefits.

d. Allow successful accomplishment of the Marine Corps official mission as set forth in reference (aj), as amended by reference (ak).

2. When using DLA HW disposal services, the Marine Corps must reimburse the DLA per procedures established by the DLA and the Comptroller of the Navy (reference (g)).

3. If a Marine Corps activity chooses to pursue an independent contract for HW disposal using non-DLA services, all aspects of the procurement (e.g., contract, technical specification, disposal criteria, quality assurance, and quality control plan) must be at least as stringent as those used by the DLA.

9204. STORAGE OR DISPOSAL OF NON-DOD HW ON MARINE CORPS PROPERTY. Marine Corps activities, with few exceptions, are prohibited by law (references (al) and (g)) from storing, treating, or disposing of non-DOD HW on site. In addition, Marine Corps policy prohibits HW generators and TSDFs from accepting non-DOD HW from off site. Subject to reference (al) specific requirements, some general exceptions to this rule are the following:

1. Storage, treatment, or disposal of materials that will be, or have been, used in connection with a DOD activity or in connection with a service to be performed on a Marine Corps installation or for the benefit of the Marine Corps (e.g., foreign military munitions that are not returned to the country of origin).

2. Storage of strategic and critical materials in the national defense stockpile.

3. Temporary storage or disposal of explosives to protect the public or to assist Federal, state, or local law enforcement agencies in storing or disposing of explosives when no alternative solution is available.

4. Temporary storage or disposal of explosives in order to provide emergency lifesaving assistance to civil authorities.

5. Disposal of excess explosives produced under a DOD contract after determining that feasible alternatives are not available.

6. Temporary storage of nuclear materials or nonnuclear classified materials under agreement with the DOE.
7. Storage of military resources for use in peacetime civil emergencies.
8. Temporary storage of materials of other Federal agencies during transportation emergencies.
9. Storage of material that is not owned by the DOD if the material is required or generated in connection with the authorized and compatible use by that person of a DOD industrial-type facility, including for testing material and personnel training.
10. Storage of HW by a non-DOD tenant organization, if there is an approved, written agreement between the host and the non-DOD organization that addresses the storage, treatment, and disposal of the non-DOD organization's HW such as in an emergency lifesaving assistance to civil authorities or the temporary storage or disposal of munitions that otherwise would pose a risk to national security.

9205. HOST INSTALLATION AND MARINE CORPS COMMANDS/UNITS AND TENANTS ACTIVITY HW INTERFACE

1. Marine Corps installations are responsible for obtaining EPA HW generation numbers and TSDF permits. However, much of the HW generated at installations is the result of Marine Corps commands/units and tenants, including training exercises. Therefore, it is important for host installations and Marine Corps commands/units and tenants to agree upon their individual responsibilities with respect to the overall base HW management program. The following paragraph discusses Marine Corps policy regarding HW management responsibilities of host and Marine Corps commands/units and tenants. (See chapter 2 of this Manual.)
2. Marine Corps policy requires that Inter-Service Support Agreements or equivalent agreements include responsibilities of both parties (host and commands/units and tenants) for the HW management program. Minimum topics to include in these agreements are funding for HW management and disposal, accumulation and storage, HW generation, HW coordinator designation, HW training, and HW minimization (use of P2 techniques).
3. Contractors working on base must comply with paragraphs 9205.1 and 9205.2.

9206. PLANS AND PROCEDURES TO PROTECT HM INVENTORIES AND HW INVENTORIES AND RECORDS DURING NATURAL DISASTERS. All commands will establish policies and procedures to protect HM inventories and HW inventories/records during natural disasters. These documents will be presented in each command's natural disaster plan(s). This process serves to identify and quantify any losses caused by a natural disaster.

CHAPTER 9

HAZARDOUS WASTE (HW) MANAGEMENT

SECTION 3: RESPONSIBILITIES

9300 CMC (LF)/CG MCI COM

1. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, state, local, and overseas HW regulatory requirements and by uniformly applying Marine Corps policy as set forth in this Manual.
2. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
3. Represent the interests of Marine Corps installations in liaison with the DRMS and DLA to ensure adequate support in the disposal of HW.
4. Conduct special environmental compliance and protection studies with regard to HW management to assist in establishing policies or initiating actions.
5. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to HW regulations.
6. Track Marine Corps progress toward meeting HW minimization goals, using the Calendar Year Hazardous Waste Annual Data Call.

9301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Identify and submit to the CMC (LF) project documentation and funding requests for HW project requirements necessary to maintain compliance with applicable existing and emerging regulations and permits. Program, budget, and fund personnel, equipment, materials, training, monitoring, and other requirements necessary for installation operations to comply with HW management to include transportation and disposal requirements to the extent permitted by law. Pay appropriate Federal, state, and local/or fees to the extent permitted by law. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. To the extent permitted by law, ensure that all required Federal, state, and/or local HW management permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all HW management projects.
3. Designate a focal point to coordinate the installation HW management program.
4. Determine, evaluate, and comply with Federal, state, and local HW management requirements, to the extent permitted by law, applicable to HW

management at a Marine Corps installation within the CONUS, or reference (ai) and FGS/JEGS requirements applicable to HW management at a Marine Corps installation OCONUS.

5. Develop an installation HWMP as described in this chapter.
6. Designate, in writing, personnel authorized to sign HW manifests for the installation.
7. Develop training programs and train personnel involved in HW operations. Such training must meet applicable Federal, state, and/or local HW management requirements (see chapter 5 of this Manual).
8. Provide technical assistance and support to commands/units and DOD tenants as needed.
9. Submit the HW data annually to NFESC and CMC (LF) via the EPR Portal.
10. Submit, as required, the biennial HW report to the EPA or authorized state.
11. Ensure that coordination occurs with the Safety Office on HW management guidelines and practices that impact risks to the health and safety of operators and response personnel.
12. Budget and fund personnel, facilities, and equipment, necessary to handle, store, transport, treat and dispose of HW generated by installations as outlined in chapter 3 of this Manual.
13. Budget and fund personnel, facilities, equipment, and other costs necessary to transport and dispose of Marine Corps command/unit and tenant generated HW as outlined in chapter 3 of this Manual.
14. In addition, CGs/COs of overseas Marine Corps installations must:
  - a. Ensure that HW (by United States or host nation definition) generated by Marine Corps actions is not disposed of overseas unless it is done in compliance with reference (ai), FGS/JEGS, and any applicable international agreement, or with the concurrence of the appropriate host nation authority if no applicable international agreement exists.
  - b. Coordinate with the DOD Environmental Executive Agent or appropriate command for the disposal of HW in the United States or another foreign nation if disposal is not possible in the host nation.
  - c. Comply with the SOFA and other applicable international agreements on the shipping and storage of HW.
15. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished by writing an ECPSOP document to implement all environmental requirements.

9302. CG/CO OF MARINE CORPS COMMANDS/UNITS AND TENANTS

1. Comply with all host installation/Commander in Chief orders and plans that govern the management of HW. Participate in the updating of orders and plans to ensure that the needs of the Marine Corps commands/units and tenants are addressed.
2. Develop command/unit and tenant orders, directives, and/or SOPs as needed to implement host installation orders and a plan that governs HW management.
3. Designate HW management personnel for each HW generation, accumulation, and storage site under the cognizance of the Marine Corps commands/units and tenants.
4. To the extent permitted by law, comply with all Federal, state, and/or local requirements applicable to HW management at the Marine Corps commands/units and tenants. Or, if overseas, comply with reference (ai) or FGS/JEGS requirements related to HW management.
5. To the extent permitted by law, comply with state and local requirements applicable to medical waste management at the command/unit and tenant command.
6. Assist the host installation HW management focal point in filling out all required regulatory reports and the Marine Corps P2ADS.
7. Direct HW management personnel to timely respond to all required data calls for HW information.
8. Budget and fund personnel, facilities, and equipment and other costs associated with the generation and preparation for transport of HW as outlined in chapter 3 of this Manual.
9. In the event of a HM or HW spill due to command or unit activity, fund cost associated with cleanup of spills and disposal of spill debris as outlined in chapter 3 of this Manual.
10. Ensure that designated HW coordinators and other personnel involved in HW management receive the appropriate HW training. Participate in the host installation's HW training program to take advantage of Marine Corps in-house expertise and economy of scale for contractor-provided training.
11. Request technical assistance from the host installation HW management focal point as needed.

REFERENCES

- (a) 42 U.S.C. 6901-6992k
- (b) Public Law 89-272, "Solid Waste Disposal Act of 1965," October 20, 1965
- (c) Public Law 98-616, "Hazardous and Solid Waste Amendments of 1984," November 8, 1984
- (d) Public Law 102-386, "Federal Facility Compliance Act of 1992," October 6, 1992
- (e) Section 1 of Public Law 104-119, "Land Disposal Program Flexibility Act of 1996," March 26, 1996
- (f) OPNAVINST 5090.1C
- (g) DOD Directive 4160.21-M, "Defense Materiel Disposition Manual," August 18, 1997
- (h) Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007
- (i) 40 CFR 264
- (j) 40 CFR 265
- (k) 40 CFR 262
- (l) 40 CFR 271
- (m) 40 CFR 261
- (n) 49 CFR 100 to 185
- (o) 40 CFR 266
- (p) DOD Directive 4145.19-R-1, "Storage and Materials Handling," September 15, 1979
- (q) MCO 4450.12A
- (r) NAVSEA SW020-AG-SAF-010
- (s) DOD Instruction 4715.6, "Environmental Compliance," April 24, 1996
- (t) DOD Directive 4001.1, "Installation Management," September 4, 1986
- (u) 42 U.S.C. 13101
- (v) Public Law 99-499, "Superfund Amendments and Reauthorization Act," October 17, 1986

- (w) 40 CFR 268
- (x) Federal Register, Volume 55, page 22520, June 1, 1990
- (y) SECNAV M-5210.1
- (z) 40 CFR 263
- (aa) 40 CFR 270
- (ab) DOD 6055.9-STD, "DOD Ammunition and Explosives Safety Standards,"  
February 29, 2008
- (ac) 29 U.S.C. 651 et seq.
- (ad) 40 CFR 273
- (ae) 40 CFR 279
- (af) 40 CFR 761
- (ag) 40 CFR 260
- (ah) 42 U.S.C. 2011
- (ai) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1,  
2007
- (aj) Public Law 80-235, "National Security Act of 1947," July 26, 1947
- (ak) Public Law 81-216, "National Security Act Amendment of 1949," August 10,  
1949
- (al) 10 U.S.C. 2692

CHAPTER 10

ENVIRONMENTAL RESTORATION (ER) PROGRAM

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CHAPTER 10

ENVIRONMENTAL RESTORATION (ER) PROGRAM

SECTION 1: INTRODUCTION

10100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with procedural and statutory requirements under the Navy Installation Restoration (IR) Program and Munitions Response Program (MRP).

10101. APPLICABILITY. See paragraph 1101.

10102. BACKGROUND.

1. The ER Program is comprised of two components, the IR Program and MRP. Through the ER Program, the Marine Corps conducts ER activities at sites on installations.

2. The IR Program identifies, investigates, and cleans up or controls HS releases from past waste disposal operations and spills at Marine Corps installations. It is designed to comply with procedural and substantive requirements of references (a) and (b), and with regulations promulgated under these Acts and relevant state laws, including reference (c). Although the IR Program is intended primarily to clean up past HS releases, it may address the cleanup of past releases of any pollutant and/or contaminant that endangers public health, welfare, or the environment, including POLs. Cleanup of past contamination from USTs and corrective action for past contamination at reference (c) sites may also be part of the IR Program.

3. The MRP investigates and cleans up munitions and explosives of concern (MEC) and munitions constituents (MC) used or released on Marine Corps sites from past operations and activities. MEC includes unexploded ordnance (UXO), discarded military munitions (DMM), and MC that present an explosive hazard. The MRP generally follows the same procedures and policies as the IR Program with some unique aspects, including the integration of explosives safety requirements. The MRP applies to munitions response sites (MRS) or Areas of Concern (AOC) known or suspected to contain MEC and MC that are located at former ranges and disposal sites at active, base realignment and closure (BRAC), and non-BRAC closure installations. NAVFAC has the primary responsibility for executing the MRP at Marine Corps active and BRAC installations.

4. For additional information and guidance on the IR Program and MRP, refer to reference (d) and the most current version of reference (e).

5. For additional information and guidance on identifying other than operational (OTO) range areas and closing historical and operational ranges, refer to the policy contained in appendix K.

10103. FEDERAL STATUTES. This section summarizes the primary Federal statutes and E.O.s that govern the ER Program. Refer to reference (e) for a full listing and description of laws that impact the ER Program. See also chapter 4

of this Manual for more information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

1. CERCLA of 1980, as Amended (42 U.S. Code [U.S.C.] 9601 et seq.). Reference (a), commonly referred to as "Superfund," authorizes Federal action to respond to the release or threatened release of HS from any source into the environment. Reference (a) also authorized the creation of a trust fund to be used by the EPA to clean up emergency and long-term HW problems. The DOD is not covered by the trust fund; however, Congress set up special funding outside reference (a), the Defense Environmental Restoration Account (DERA), to pay the cost of DOD responses to HW site remediation. In a memorandum issued on 3 May 1995, the Deputy Secretary of Defense devolved DERA to the military departments and defense agencies. The account that funds Marine Corps requirements is now referred to as the Environmental Restoration, Navy (ER,N) account. The ER,N account is used to execute both the IR Program and the MRP.

a. SARA of 1986 (Public Law [PL] 99-499). Reference (b) reauthorized and amended the authorities and requirements of reference (a). Reference (b) requires Federal facilities to comply with the same procedural and substantive requirements that nongovernmental entities are subject to. Additionally, reference (b) established the Defense Environmental Restoration Program (DERP), which has a substantially larger scope than reference (a). Provisions of reference (b) that are of primary importance to the ER Program are set forth in section 120, which addresses response actions at Federal facilities, and in section 211, which codifies the DERP into law.

b. Community Environmental Response Facilitation Act (CERFA) of 1992 (PL 102-426). Reference (f) amends section 120(h) of reference (a), Property Transferred by Federal Agencies. The provisions of CERFA require the Federal Government to rapidly identify and return to local communities, clean properties identified under the BRAC process. Thus, Marine Corps installations subject to BRAC are required to identify real property on which HS or petroleum products (including their derivatives) were stored for one or more years or were known to have been released or disposed of. These real properties must be identified and regulatory concurrence obtained within either: 18 months after the real property is selected for closure or realignment or 18 months after a joint resolution disapproving the closure or realignment must be enacted and such resolution was not enacted. Reference (f) also clarified the phrase, "remedial action taken" in reference (a), section 120(h)(3).

c. National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (Title 40 (CFR) Part 300). Reference (g) is the regulation that implements the statutory requirements of reference (a), reference (b), and section 311 of reference (h). Subpart E of reference (g) defines the procedural requirements for responding to releases or threats of releases from HS, pollutants, or contaminants. Subpart D of reference (g) addresses requirements for responding to oil discharges into U.S. navigable waters.

2. RCRA of 1976 (42 U.S.C. 6901 et seq.). Amended by the HSWA, references (c) and (a) are closely associated with each other. Of particular note is section 3004(u) of reference (c) (i.e., corrective action) by which the EPA or a state may require the cleanup or a schedule for investigation and cleanup of all

inactive SWMU on an installation before issuing a RCRA Part B permit for current HW operations at the installation. Cleanup standards may be different under reference (c) (e.g., timetables) than under reference (a). Therefore, in instances where an installation is required to comply with reference (c), both ER Program cleanup schedules and standards may be impacted. The interface between references (c) and (a) is explained in detail in reference (e). The implementing regulations of reference (c) that may apply at reference (a) sites are codified in reference (i). See also chapters 9 and 18 of this Manual for relevant information on HW management and USTs.

3. National Defense Authorization Act (NDAA) of 2002 (10 U.S.C. section 2710). As part of reference (j), Congress mandated that DOD and its military components develop a program to address military munitions under DERP. DOD responded by developing a unique element under DERP, the Military Munitions Response Program (MMRP), to more thoroughly address potential hazards remaining from its past use of military munitions. The MMRP addresses the explosive safety hazards associated with MECs and the human health and environmental risks associated with MCs. The Marine Corps MRP is fully executed by NAVFAC. Policy and guidance for the Marine Corps MRP follow the Navy's MRP (refer to reference (d) and reference (e)).

4. NEPA of 1969 (42 U.S.C. 4321 et seq.). The primary requirement of NEPA is to incorporate environmental considerations into decision-making processes of major Federal actions that may significantly impact the quality of human health and the environment. NEPA requires Federal agencies to document the reasonably foreseeable environmental impacts of a proposed action while complying with public participation requirements. NEPA does not apply to ER Program actions performed in accordance with references (a) and (g).

5. Defense Authorization Amendments and Base Realignment and Closure Act (BRAC) of 1988 (PL 100-526) and Defense BRAC of 1990, as Amended (PL 100-510). References (k) and (k) were enacted by Congress to address excess capacities at military bases. The BRAC process allows DOD to reorganize installation infrastructure to more efficiently and effectively support military forces, increase operational readiness, and facilitate new ways of doing business. To date, there have been five rounds of BRAC conducted in 1988, 1991, 1993, 1995, and 2005. Before property closed under BRAC can be transferred to a public entity for reuse, it must be environmentally clean. To facilitate environmental cleanups at Navy and Marine Corps BRAC installations, a BRAC Cleanup Program was established under the Navy BRAC Program Management Office (PMO) (reference (m)). The BRAC PMO, with support from NAVFAC, administers the ER Program at Marine Corps BRAC installations. A separate BRAC account is used to fund BRAC Cleanup Program activities at Marine Corps BRAC installations. Generally, all procedures and requirements that apply to active installation cleanups apply to BRAC cleanups.

6. E.O.s

a. E.O. 12088, October 13, 1978, "Federal Compliance with Pollution Control Standards," requires each Executive Agency to comply with applicable pollution control standards. Compliance with applicable pollution control standards means conforming to the same substantive, procedural, and other requirements that apply to private citizens. The E.O. also states that each

head of the Executive agency is responsible for ensuring all necessary actions are taken for the prevention, control and abatement of environmental pollution with respect to Federal facilities and activities under the control of the agency.

b. E.O. 12580, January 23, 1987, "Superfund Implementation," delegates Federal agencies as lead CERCLA authority, including DOD. The lead agency authority for DOD has been re-delegated to its individual departments. The E.O. also requires DOD to provide a representative to the NRT.

7. State Laws. Many states have laws analogous to reference (a). Reference (a) does not enable delegation of the Superfund Program to states; however, under reference (a), section 120(a)(4), state laws concerning removals, remedial action, and enforcement apply to Federal facilities not listed on the National Priorities List (NPL).

#### 10104. REQUIREMENTS

1. ER Program Phases and Milestones. General phases and milestones are set forth under reference (e) for initiating and carrying out the remedial action process at reference (a) sites (see reference (e) for detailed information). The ER process is outlined in Figure 10-1 and summarized below:

a. Site Discovery and Notification. This is the first step in addressing uncontrolled or abandoned HS sites at Marine Corps installations. Marine Corps installations must report any HS release or threat of a release to the EPA, state, and appropriate local authorities. Installations must also report releases or threats of releases to the chain of command using the reporting format contained in appendix I. If the release exceeds the RQ as defined under reference (a), the installation must also notify the NRC immediately at 1-800-424-8802 or 202-267-2675. If notification of the NRC is not practical, the installation should notify the regional EPA-designated OSC or the Coast Guard.

b. Removal Action. In situations where prompt action is required to address releases or threats of releases, reference (g) allows for the implementation of a removal action to be performed in an expedited manner. There are three categories of removal actions based on the type of situation, the urgency of the threat of the release, and the subsequent time frame in which the action shall be initiated. A removal action could be either the final remedy or an interim action, followed by a longer-term remedial action as the final remedy. The three categories of removal actions are:

- (1) Emergency removal actions.
- (2) Time critical removal actions.
- (3) Non-time critical removal actions (reference n).

c. Preliminary Assessment/Site Inspection (PA/SI). This phase identifies contaminated sites based mostly on the review of the existing information about HW disposal practices at an installation. Limited field data may be collected to determine the nature of any releases and potential threat to any receptors. Sites that do not pose an unacceptable risk to human health and the environment are designated as "no further action" (NFA) sites. The NFA designation is also

referred to as "no further remedial action planned" (NFRAP). If PA/SI results indicate that a site requires prompt action, then a removal action is performed. Otherwise, the site moves into the Remedial Investigation/Feasibility Study (RI/FS) phase.

d. RI/FS. The purpose of the RI/FS is to determine the nature and extent of the threat presented by the HS release and to evaluate proposed remedies, as deemed necessary. The RI includes a sampling and analysis program and a baseline ecological and human health risk assessment. If it is determined that remedial action is necessary, the FS is conducted which includes an initial screening of remediation alternatives followed by a detailed evaluation. The RI or FS also may recommend NFA sites.

e. Record of Decision (ROD). Following completion of the RI/FS phase, the preferred alternative is documented in a proposed ROD and is made available for public comment. All required remedial actions for the site or operable unit (OU) are documented in the ROD. The ROD includes a summary of site conditions, selected remedy, remedial action objectives, and the rationale for selecting the remedy. For non-NPL sites, instead of a ROD, a Decision Document may be prepared with similar scope as a ROD, but with the state as the lead regulatory agency.

f. Remedial Design (RD). This phase involves preparing the detailed design of the remedial action selected in the ROD.

g. Remedial Action-Construction (RA-C). The designed remedial system is constructed at the site during this phase. This phase also may include any construction related to implementation of Land Use Controls (LUCs).

h. Remedy in Place (RIP). This milestone is achieved when the construction of a long-term remedy is complete and the remedy is operating as planned to meet project remedial action objectives in the future, or a short-term remedy has been successfully implemented and the final documentation is being prepared. Determination of achieving the RIP milestone is a Marine Corps decision and regulatory concurrence for this milestone is not needed.

i. Remedial Action-Operation (RA-O). This phase involves operation, maintenance, and monitoring actions for the remediation system and site. The RA-O phase may also include implementation, and management/maintenance of LUCs, if these were part of the selected remedial action in the ROD or DD. Periodic monitoring reports are routinely prepared during this phase to document performance of remediation systems.

j. Response Complete (RC). This milestone signifies that the remedial action objectives have been met and the RA-O phase, if required, has achieved cleanup goals specified in the ROD or DD. Formal documentation for the RC milestone is essential to ensure recognition of completion of cleanup goals at the site. Prior to claiming completion of the RC milestone, regulatory concurrence of this documentation is required.

k. Long-Term Management (LTMgt). Following the RC milestone, this phase may be required to monitor long-term protectiveness of the remedy. Actions during this phase may involve groundwater monitoring, implementation and management of LUCs and preparation of five-year review reports. The LTMgt

phase is also required when the cleanup goals do not allow unrestricted use of the site property.

l. Five-Year Review. Five-year reviews are required where a selected remedial action results in HS, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure. The first five-year review clock for a site is triggered by the on-site mobilization date for remedial actions that require a RA-C phase. For remedies that do not require a RA-C phase, the trigger is the ROD or DD signature date.

m. Site Closeout (SC). This milestone signifies that active management and monitoring at a site is complete, the remedy is protective of human health and the environment, contaminant levels at the site allow for unrestricted use and unlimited exposure, and there is no expectation of expending additional ER,N or BRAC funds at the site. The SC milestone can occur at any stage during the response action (e.g., at the completion of the PA/SI, Removal Actions, RI/FS, RA-O, or LTMgt phases) and is dependent on the remediation requirements. However, there are some sites that will achieve protectiveness of human health and the environment while never achieving the SC milestone. These are sites where contaminants are left in place, such as a landfill, which require funds to ensure the protectiveness of the remedy.

n. NPL Delisting. Reference (g) allows EPA to delete or re-categorize a site on the NPL where no further response is appropriate. The EPA, in consultation with the state, will determine whether the NPL site has met the requirements, and if so, will prepare a NOI to delete. The notice will be made available to the public for comment. All sites within a Federal installation must achieve the RC milestone before delisting from the NPL, although partial delistings are possible.

## 2. ER Program Procedural Requirements

a. Federal Agency HW Compliance Docket. Reference (a) requires that EPA maintain a Federal Agency HW Compliance Docket that contains information regarding Federal facilities that manage HS or from which HS may be or have been released. A state governor may petition EPA to add a facility to the docket. The docket lists all installations that have submitted ER information to EPA.

### b. Interagency Agreement (IAG)/Federal Facilities Agreement (FFA)

(1) As required by section 120(e) of reference (a), Federal agencies must enter into an IAG with the EPA to facilitate the expeditious completion of all necessary remedial actions. IAGs are required within 180 days after completion of each RI/FS for an NPL site.

(2) To expedite the cleanup process, where possible, the Marine Corps should enter into an FFA with the EPA and/or the state soon after an installation is proposed for NPL listing. FFAs are not required by law, but are generally required by DOD and Navy policies. For purposes of meeting the IAG requirement, the FFA becomes an IAG once the ROD is signed and new schedules are negotiated for the actual remedial action.

c. Administrative Record (AR)/Retention of Records

(1) Reference (g) requires the establishment of an AR for all reference (a) sites. The AR contains those documents which form the basis for selection of a response action and any future legal action concerning the site. The Marine Corps must establish an AR at the start of the RI for remedial actions, and at the time of the engineering evaluation/cost analysis for removal actions. The AR must be made available to the public in an information repository located at or near the site. A notice of availability is part of the AR.

(2) Reference (a) requires that any person responsible for providing notification of known, suspected, or likely releases should retain records of the facility and HS releases for 50 years after reference (a) was enacted (i.e., the year 2030), or for 50 years after the record was established, whichever is later (section 103(d)(2) of reference (a)).

d. Public Participation. Reference (a) includes provisions to engage the public during the process (section 9617 of reference (a)). Reference (g) implements reference (a) provisions by requiring the lead agency (the Navy in this case) to inform and involve the public during the removal and remedial action processes (sections 415, 430, and 435 of reference (g)). As stipulated in reference (g), lead agencies must conduct interviews to solicit input from local officials, residents, public interest groups, or other interested/affected parties; develop a formal Community Relations Plan (CRP) based on the public interviews; provide public opportunity for the review and comment of documents; and create an information repository for public availability. The lead agency must also inform the community of the availability of technical assistance grants.

e. Technical Review Committee (TRC)/ Restoration Advisory Board (RAB). Section 211 of reference (b) requires that whenever possible and practical, a TRC be established to review and comment on actions and proposed actions for releases or potential releases at the installation. TRCs should be converted to RABs to enhance community participation in the review and comment process. A RAB acts as a liaison between the community and the installation and can help reduce potential communication problems that could result in delay. DOD has proposed regulations for the establishment, operation, and adjournment/dissolution of RABs (reference (o)). This proposal applies to all RABs, regardless of when they were established.

f. Health and Safety. Response actions under the reference (g) must comply with the provisions for the protection of the health and safety of workers engaged in HW operations (Section 120 of reference (p)). These provisions include requirements for: developing a site health and safety plan, establishing site access control, enforcing standard operating safety procedures, implementing medical surveillance procedures; providing for environmental and personnel monitoring, providing appropriate PPE, and establishing emergency procedures. Reference (e) provides detailed requirements for the protection of worker health and safety and proper personnel training. Safety requirements unique to MRP sites are also summarized in reference (e).

g. Public Health Assessment. The Agency for Toxic Substances and Disease Registry (ATSDR) must perform a health assessment for each facility listed or

proposed for the NPL. The results of the ATSDR analysis are used in the RI/FS, as appropriate.

h. Remedial Action Completion Report (RACR). Marine Corps installations should prepare a RACR when all remedial action objectives have been met and no significant threat to public health or the environment exists. The Marine Corps should seek written concurrence on this report from EPA and the state. Regulatory concurrence or buy-in on this report confirms achievement of the RC milestone. A final RACR should be prepared once the remedial action objectives have been met at the last site or OU at an installation. The final RACR should provide a summary and reference for all the previous RACRs and for any NFA ROD(s) for the installation. The individual RACRs or final RACR for an installation provides the basis for partial or full deletion from the NPL.

3. Military Munitions Response Program Process. The MRP cleanup process generally follows the process per reference (a) outlined above. Additionally, MRP incorporates unique explosives safety requirements that may occur during the munitions response process as outlined in an explosive safety submission through Headquarters, Marine Corps Systems Command. Additional requirements for the MRP include: (detailed information can be found in reference (e).) For guidance on how to enter a site into MRP, refer to figures 10-2 and 10-3.

a. Inventory. Reference (j) requires that DOD and its components develop and maintain an inventory of sites known or suspected to contain UXO, DMM, and MC. This inventory of MRS is updated annually, provided to the Office of the Under Secretary of Defense for Installation & Environment, and is shared with public stakeholders and regulators to ensure that all MRS are identified.

b. Site Priority. Per reference (q)), the DON shall assign a relative priority to each MRS in the inventory. The MRS prioritization protocol process requires consultation with Federal agencies, Indian Tribes, states, and public stakeholders. Site priorities will be annually reviewed and updated based on new information and site conditions. An independent quality assurance panel led by CNO (N45) shall be established to review all prioritization decisions to ensure consistent and appropriate application of the MRS prioritization protocol.

c. Sequencing. Sequencing of sites shall be developed in consultation with appropriate regulators and stakeholders. Typically, higher priority sites are addressed before lower priority sites. If sequencing results in a lower priority site being addressed before a higher priority site, the Navy shall provide specific justification for this action. Information that influences the sequencing of a site shall be included in the AR and the Information Repository.

#### 10105. TERMS AND DEFINITIONS

1. Administrative Closure. Identified areas eligible for only administrative closure have had no known and/or documented military munitions use, and either no longer support operational range activities or are planned to support activities that are not compatible with range activities. Examples of such sites include parking lots, residential buildings, daycare/schools, etc. Administrative Closure sites also could be sites that were included in MRP inventory due to an administrative error (duplicate site, previously closed site, site already addressed under the IR Program, etc.).

2. AR. Required by section 113(k) of reference (a), an AR is the documentation, formed by the combination of documents and other material, which provides the basis for the Marine Corps installation's selection of a response action.
3. After Action Report. A document required after completion of a munitions response. The after action report documents that the explosives safety aspects of the response have been completed as outlined in the approved explosive safety submission and addresses the MEC found, effectiveness of the response techniques, any LUCs, LTMgmt provisions for the residual risk, and other pertinent information.
4. Applicable or Relevant and Appropriate Requirements (ARARs). Used for establishing the standards for cleanup based on the chemicals involved, the location, the suspected health impacts, or the response action technologies proposed at the site. ARARs are required by section 121(d) of reference (a), which states that a requirement under other environmental laws may be either "applicable" or "relevant and appropriate" to an RA, but not both. The two-tier test first determines whether a given requirement is applicable; then, if it is not applicable, it determines whether it is nevertheless relevant and appropriate.
5. Applicable Requirements. The cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal and state laws that specifically address an HS, pollutant, contaminant, remedial action, location, or other circumstances at a CERCLA site. "Applicability" implies that the remedial action and the circumstances at the site satisfy all of the jurisdictional prerequisites of a requirement.
6. BRAC. The process DOD uses to reorganize its installation infrastructure to more efficiently and effectively support its forces, increase operational readiness and facilitate new ways of doing business. ER activities at closing and realigning installations affected by references (m) and (n) are funded by Navy BRAC accounts.
7. Community Involvement Program (CIP). A formal written proactive public information program developed by each installation. The plan must take into account the public comment period that precedes final selection of remedial or corrective action. The plan consists of background and history of community involvement at the site, ER Program objectives, community involvement activities to be used to reach the objectives, and a mailing list of involved persons. The plan must be based on discussions with state and local authorities, civic and community organizations, interested residents, and local news media representatives.
8. Defense and State Memorandum of Agreement (DSMOA). An agreement between the DOD and a state or territory whereby the state or territory can be compensated for providing technical support for ER activities at operational installations, closing and realigning installations, and Formerly Used Defense Sites (FUDS).
9. DERA. A funding account established by section 211 of reference (b) to pay

the cleanup costs of DOD HW sites. Funds from DERA are transferred to the services for uses consistent with DERP. Beginning in FY97, DERA was devolved to the military departments. The Navy accounts are called the ER,N account (for installations) and BRAC account (for BRAC installations).

10. DMM. Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental law and regulations.

11. Discharge. For purposes of reference (g), discharge, as defined by section 311(a)(2) of reference (h), includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, not covered by a permit under section 402 of reference (h). For purposes of the reference (g), discharge also means the threat of discharge.

12. ER,N Account. DON account used to pay for cleanup of HW sites.

13. Explosive Safety Submission. A document required prior to the initiation of any munitions response activities (excluding explosives or munitions emergency responses) that involve explosives, intentional physical contact with MEC, or ground disturbing or other intrusive activities in areas known or suspected to contain MEC. The explosive safety submission addresses the explosives safety aspects of a munitions response including, but not limited to, site location, response techniques, the munition with the greatest fragmentation distance, explosives safety arcs or exclusion zones, site conditions, and other pertinent information.

14. Facility. As defined under section 101(9) of reference (a), any building, structure, installation, equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, aircraft, or any site where an HS has been deposited, stored, disposed of, placed, or otherwise come to be located.

15. FFA. A formal, negotiated, legal agreement between the Marine Corps and the EPA governing the administrative process of references (a) and (c) for cleanup of NPL sites. The FFA establishes objectives, responsibilities, procedures, and schedules for the RI/FS phases at NPL installations. FFAs are intended to outline the working relationship and to improve communications between all parties by allowing the EPA to review all work and ultimately to make the selection process of any RAs less argumentative. States may participate in the FFA at their discretion.

16. Federal Facility State Remediation Agreement (FFSRA). A negotiated non-regulatory legal agreement governing the CERCLA and RCRA administrative process for cleanup at certain non-NPL sites. As with FFAs, provisions of FFSRAs are factors in setting project execution priorities through risk management, and are also tools for formalizing commitments, making selection of remedial action less adversarial.

17. Five-Year Review. If a remedial action results in HS, pollutants, or contaminants remaining at the site above levels allowing unlimited use and

unrestricted exposure, that remedy must be reviewed not less often than every 5 years thereafter.

18. Hazard Ranking System (HRS). The EPA must score HS releases by their potential to affect human health, welfare, and the environment. The HRS is a means of applying uniform technical judgment regarding the potential hazards presented by the feasibility, desirability, or degree of cleanup required. The HRS ranks sites by a mathematical rating scheme. Historically, the EPA has proposed sites with scores above 28.5 for the NPL.

19. HS. Any material which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment when released or spilled. In the ER Program, an HS is defined in section 101(14) of reference (a), and designated under reference (r).

20. IAG. An agreement between the EPA and the Marine Corps to ensure the expeditious completion of RAs (section 120(e) of reference (a)). IAGs are required for installations listed on the NPL and must include a review of alternative RAs, the selection of a remedial action by the Marine Corps and the EPA, a schedule for the completion of each remedial action, and arrangements for long-term operation and maintenance of the facility.

21. Interim Remedial Action. An interim removal action is a near-term action taken to address HS releases that require an expeditious response. Interim removal actions are often the first response to a release or threatened release.

22. LUCs. LUCs include engineering controls (ECs) and institutional controls (ICs). ECs are remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs may include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile, and monitoring wells. ICs are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. ICs include easements, deed restrictions, zoning, and permits.

23. Lead Agency. The agency that provides the OSC or Remedial Project Manager (RPM) to plan and implement response actions under reference (e). The DON is always the lead agency for response actions on Navy and Marine Corps real property.

24. LTMgt. The period of site management (maintenance, monitoring, record keeping, five-year reviews, etc.) initiated after the remedial action objectives have been met, but HS, pollutants, or contaminants remain on site and are above levels that would allow for unlimited use and unrestricted exposure.

25. Military Munitions. All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the DOD, U.S. Coast Guard, DOE, and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives; pyrotechnics; chemical and riot control agents; smokes; and incendiaries; including bulk explosives and

chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, except that the term does include non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the DOE after all required sanitization operations under reference (s), as amended, have been completed.

26. MRP Process. The MRP focuses on protecting human health and the environment from hazards and risks associated with MEC and MC. The MRP cleanup process follows the CERCLA process and incorporates unique explosives safety requirements that may occur during the munitions response process. For guidance on how to enter a site into MRP, refer to figures 10-2 and 10-3.

27. MEC. MEC consists of military munitions that are UXO, DMM and MCs present in high enough concentrations as to pose an explosive hazard.

28. MC. Any materials originating from UXO, DMM, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

29. Munitions Response. Response actions that include investigation, removal actions and remedial actions to address the explosives safety, human health, or environmental risks presented by UXO, DMM, or MC.

30. MRSe. A discrete location that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges, munitions burial areas, and explosive processing facilities. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions.

31. NPL. The EPA's list of priority sites located throughout the United States with known releases or threatened releases of HSS, pollutants, or contaminants. Historically, sites that have scored above 28.5 on the HRS have been proposed for the NPL. The list is revised at least annually.

32. NFRAP. Sites which do not warrant moving further in the site evaluation process are designated as NFRAP. The primary criterion for NFRAP is a determination that the site does not pose a significant threat to public health or the environment. A NFRAP decision can be made at several points in the ER process, but must be documented and may be reversed if future information reveals that additional remedial activities are warranted.

33. OU. A discrete action that comprises an incremental step toward addressing site problems comprehensively. This discrete portion of a remedial response manages migration or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of OUs, depending on the complexity of the problems associated with the site. OUs may address geographical portions of a site, specific site problems, or initial phases of an action, or it may consist of any set of actions performed over time or any actions that are concurrent but located in different

parts of a site.

34. Potentially Responsible Party (PRP). A generator, transporter, or site owner or operator who may be responsible for an HW site. This term is usually used in connection with off-installation sites.

35. PA/SI. The PA consists of a review of available historic information (records search) concerning installation activities and land use and identifies whether the site needs additional investigation due to potential contamination. The SI is an on-site visit consisting of limited sampling and analysis designed to verify the preliminary findings of the PA. Results of the PA/SI will determine the need for further investigation and whether the sites merit placement on the NPL by the EPA.

36. ROD. A written record on the appropriate remedy selected for the cleanup at a site.

37. Release. As defined by section 101(22) of reference (a): any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any HS, pollutant, or contaminant). A release excludes the following: any release that results in exposure to persons solely within a workplace, specifically a claim that such persons made; emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; release of source, byproduct, or special nuclear material from a nuclear incident or any processing site that meets the conditions specified in reference (a); and the normal application of fertilizer. In reference (e), release also means a threat of a release.

38. Relative Risk. The evaluation of individual sites to determine high, medium, or low relative risk to human health and the environment, based on contaminant hazards, migration pathways, and receptors, in accordance with reference (t). Risk reduction is the movement of any site from a higher to a lower risk category because of natural attenuation or interim remedial, remedial, or removal actions taken.

39. RA. Action consistent with permanent remedy taken instead of, or in addition to, removal actions to prevent or minimize the release of HSS. There are two phases of an RA:

a. RA-C. RAC is the construction of the final remedy. RACs may include final remedies such as a soil removal or landfill cap, in which case the site would be considered an RC at the end of the RAC phase, or the RAC may be the construction of an active remediation system (pump and treat, soil vapor, extraction, etc.), that will have to be operated for an extended period prior to meeting the remedial objectives. In the latter case, once construction of the system is complete, it is considered a RIP. This phase may also include any construction related to the implementation of LUCs.

b. RA-O. RA-Os are operation and maintenance (O&M) activities required after the RA-C is completed and before RA-C objectives have been met (i.e., before RC has been achieved). Monitoring programs on a site during the RA-O

are part of the RA-0 phase versus the LTMgt phase.

40. RD. The preparation of technical work plans, drawings, and specifications that convert the conceptual design for the selected remedy from the FS into a full-scale detailed design for implementation. The RD phase begins after completion of the ROD.

41. RI/FS. A comprehensive investigation required for sites identified in the SI that pose potential threats to human health or the environment. The RI/FS is an extensive technical study conducted to determine the nature and extent of the threat posed by the release and to determine what action, if any, should be taken to remediate the site.

42. RIP. RIP is that point in time when the RAC of a system is complete, but the remedial objectives have not been met. This term is only used when there is a period of RAO following the RAC.

43. Removal Action. A Removal Action is a near-term action taken to address HS releases that require an expeditious response. Removal actions are often the first response to a release or threatened release.

44. RQ. The threshold quantity of an HS that must be reported if released. Section 102 of reference (a) requires that the EPA establish and revise a list of HSs and their associated reportable quantities; this list is contained in part 4 of reference (r).

45. RC. RC is achieved when the remedial action objectives have been met. The CG/CO makes this decision with regulatory concurrence when required under a cleanup agreement (FFA for NPL sites, FFSRA for some non-NPL sites).

46. RAB. A group established, wherever possible and practical, to act as a forum for discussion, information exchange, and decision making on actions and proposed actions with respect to releases or threatened releases at IR sites. Committee participants may include representation from the EPA, appropriate state and local authorities, community members, and Marine Corps participants from the involved command and NAVFAC. The RAB is intended to enhance public involvement by bringing into the resolution process community members who reflect the diverse interests within the local community, enabling the early and continued two-way flow of information, concerns, values, and needs between the community and the installation. RABs will not make decisions on ER activities, but will provide information, suggestions, and community input to be used by the Marine Corps in making decisions on actions and proposed actions regarding releases or threatened releases. RABs will not take the place of community outreach and participation activities required by law, regulation, or policy. All community involvement requirements must still be met.

47. Site. A location on an installation's property where an HS has been deposited, stored, disposed, placed, or otherwise located. Such areas may include multiple sources and may include the area between sources. This condition should not be confused with the EPA listing an entire installation on the NPL. An NPL installation will generally have several discrete sites.

48. SC. This milestone signifies that the Marine Corps has completed active management and monitoring at a site, the remedy is protective of human health and the environment, no restrictions on future land use are needed for this site, and no additional funds are expected to be expended at this site. As such, SC is an important milestone; but, unlike RIP or RC, it is not a DOD metric for measuring progress of the ER program.

49. SWMU. In RCRA corrective action, any unit in which wastes have been placed at any time, regardless of whether the unit was designed to accept SW or HW. Such units could include old landfills, wastewater treatment tanks, and leaking process or waste collection sewers.

50. TRC. A committee required under section 211 of reference (b) to facilitate review and comment on technical aspects of response actions and proposed actions that pertain to releases or threatened releases at DOD installations. Members of the TRC include the Marine Corps, EPA officials, appropriate state and local authorities, Federal and state natural resource trustees, and community representatives.

51. Third-Party Site. An off-station or third-party site is a contractor-owned and contractor-operated HS release site that received Marine Corps HW and now requires corrective action under reference (a).

52. UXO. Military munitions that have been primed, fused, armed, or otherwise prepared for action; have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and remain unexploded either by malfunction, design, or any other cause.

CHAPTER 10

ENVIRONMENTAL RESTORATION (ER) PROGRAM

SECTION 2: MARINE CORPS POLICY

10200. GENERAL

1. All actions carried out under the Marine Corps ER Program must be accomplished in compliance with requirements under references (a) and (b) and ARARs under reference (c) and other environmental laws and their implementing regulations. As a matter of Marine Corps policy, reference (a) is the preferred process for conducting cleanups. FFAs usually specify that cleanups be accomplished under reference (a), with reference (c) as a potential ARAR. The Marine Corps should attempt to incorporate the regulator's substantive requirements to the maximum extent possible within the Marine Corps' program per reference (a) and arrive at compromises that respect both parties' claims of authority. The Marine Corps may not adopt any cleanup guidelines that are inconsistent with reference (g) or ARARs. Terminology used throughout the Marine Corps ER Program must be consistent with references (a), (b) and (c). Marine Corps installations shall clean up sites with higher risk before those with lower risk and follow applicable ER Program guidance, directives, instructions, and policies provided in Appendix A of reference (e).

2. ER Program funding for active Marine Corps installations is provided exclusively through the ER,N account; whereas, ER Program funding for Marine Corps installations undergoing BRAC action is provided exclusively via a separate BRAC account. Other types of funding are not authorized in lieu of, or to supplement, ER,N or BRAC cleanup funds, except where the work is within the scope of MILCON or Operations and Maintenance, Navy (OM,N) funded construction projects.

3. The Commander, NAVFAC manages the fiscal and technical aspects of the ER Program at Marine Corps installations; however, the installation CG/CO is responsible for approving ER Program actions. Installations will provide the lead on critical procedural aspects of the program with support from NAVFAC. Success requires close cooperation and teamwork between NAVFAC and each installation. The BRAC PMO office, with support from NAVFAC, administers the ER Program at Marine Corps BRAC installations. Generally, all policies that apply to active installation cleanups also apply to BRAC cleanups.

10201. EMERGENCY RESPONSE. Under section 104 of reference (a), reference (u), and reference (g), the Marine Corps has the authority to respond to emergency situations (i.e., a release poses an immediate endangerment to human health or the environment) where the release is on a Marine Corps facility or the Marine Corps is the sole source of the release. NAVFAC is responsible for responding to emergency situations at Marine Corps ER sites. ER,N funds shall be used in emergency situations where ER sites are involved.

10202. NFRAP. The Marine Corps should not expend resources on sites that pose little or no threat to human health or the environment. An NFA decision can be made at several points within the remedial process, but must be based on a defensible and properly documented "assessment of risk to human health and the

environment." The Marine Corps may apply this procedure at both NPL and non-NPL installations to describe those locations where it has been determined that no further action is required, based upon appropriate investigation. NFRAP decision documents must be prepared by NAVFAC or its designee and signed by the installation CG/CO. Upon signature, the installation must forward the NFRAP decision documentation to appropriate regulatory agencies for information and/or concurrence and must ensure that the public receives notification via RABs, public meetings, or other appropriate methods. RPMs must be alert to document opportunities for a NFRAP decision.

10203. AR. The NAVFAC initiates the AR as soon as the SI shows that the program will move into the RI/FS phase and at the time of the engineering evaluation/cost analysis for removal actions. NAVFAC establishes and maintains the AR (using ER,N/BRAC funds as appropriate) and sends copies to the installation, the state, and the EPA as appropriate. NAVFAC must also ensure that a copy of the AR is made available to the public in an information repository located at or near the site. A notice of availability is part of the AR. The AR contains the documents which form the basis for selection of response actions taken by the DON and any future legal action concerning the site. Where the DON conducts cleanup actions under corrective action authority per reference (c), the AR is not required.

10204. RAB. Regardless of the cleanup authority (references (a) or (c)), Marine Corps installations will establish RABs at all installations with cleanup programs where there is sufficient, sustained community interest (reference (d)). RABs shall not take the place of community outreach and participation activities required by law, regulation, or policy. Therefore, Marine Corps installations must still meet all public participation requirements. Specifically, Marine Corps installations will establish RABs if:

1. A Federal, state, or local government requests that a RAB be formed.
2. 50 local residents sign a petition requesting that a RAB be formed.
3. An installation determines that a RAB is necessary.
4. The installation is scheduled for base closure.

10205. PUBLIC INVOLVEMENT. Navy/Marine Corps public involvement requirements are more comprehensive than NCP requirements. Under Navy policy, a CRP is required for all sites, regardless if the installation is on the NPL. NAVFAC is responsible for implementing public information programs at installations. The installation CG/CO shall appoint a contact or spokesperson (may be the RPM) for community involvement activities that shall be responsible for receiving all inquiries and releasing information concerning the ER Program.

10206. HEALTH AND SAFETY. NAVFAC shall ensure that a worker health and safety plan is prepared by each contractor and that the contractor complies with the plan.

10207. PUBLIC HEALTH ASSESSMENT. The Navy Marine Corps Public Health Center (NMCPH) shall coordinate with ATSDR concerning public health assessments. NMCPH shall ensure that ATSDR is aware of new NPL listings and coordinate any

ATSDR visits to installations with the installation and NAVFAC. NMPHC shall review public health assessments performed by ATSDR.

10208. ROD/DECISION DOCUMENT. NAVFAC will provide a recommended ROD or decision document to the installation CG/CO and BRAC PMO (for BRAC installations) at the conclusion of an RI/FS. The installation CG/CO must review carefully the proposed ROD/decision document and the AR. If the CG/CO or BRAC PMO disagrees or has questions on the ROD, the issues must be resolved through consultation with NAVFAC and the CMC (LF). For NPL sites, the ROD is forwarded to the EPA regional office for concurrence. Although neither a ROD nor an IAG is required under reference (a) at non-NPL sites, state remediation laws may contain requirements for decision documentation. Where such requirements apply, the NAVFAC must write a decision document that satisfies state law for submittal by the installation. If the state remediation law contains no specific requirements for decision documentation, NAVFAC must write a decision document that contains the elements of a ROD and the installation CG/CO or BRAC PMO (in the case of BRAC installations) must forward the document to the EPA and the state.

10209. REMEDIAL DESIGN/REMEDIAL ACTION (RD/RA). The RPM shall oversee coordination of the RD/RA with the installation, the EPA, state and local officials; maintain the AR; participate in community involvement; and ensure overall quality assurance/quality control. NAVFAC shall ensure that the remedial action meets all specifications and is constructed in a manner that protects human health, welfare, and the environment. Remedy effectiveness should be evaluated at least annually to ensure efficient progress in meeting project goals. Optimization opportunities should also be identified and implemented.

10210. LTMgt. Where HSs, pollutants, or contaminants remain on a site after RC is achieved, and as required by the decision document, LTMgt is the responsibility of NAVFAC using ER,N funds for five years after the last site reaches the RC milestone. After that time, LTMgt will be provided by the installation using OM,N funds. NAVFAC will develop and implement a LTMgt Plan that identifies the specific requirements for each site requiring LTMgt. Prior to handover of the LTMgt responsibility to the CG/CO, NAVFAC will provide the LTMgt Plan and cost data to allow for timely budgeting of any funds required.

10211. FIVE-YEAR REVIEW. NAVFAC is responsible for the five-year review for the entire installation. ER,N funds shall be used until five years after the last site at the installation achieves the RC milestone. The installation then becomes responsible for conducting and funding five-year reviews using installation OM,N funds after that period of time. Within the five-year span following final site RC, NAVFAC will include the schedule and cost estimates for conducting subsequent five-year reviews in the LTMgt Plan and provide it to the installation CG/CO. It is recommended that the installation use NAVFAC for subsequent five-year reviews.

10212. REMEDY OPTIMIZATION. NAVFAC is responsible for identifying and implementing remedy optimizations using ER,N funds. Once the installation becomes responsible for LTMgt, the installation must use OM,N funds for opportunities to optimize remedy and reduce costs.

10213. SC. The following actions must be taken when it is determined that no

further response actions are appropriate for the site ("site," in this case, refers to the installation as a whole).

1. NPL Sites. The installation must notify the EPA regional office that appropriate response actions have been completed and must request that the site be deleted from the NPL. NAVFAC and the installation must provide information and public notification, as appropriate.

2. Non-NPL Sites. The installation must notify the EPA regional office and the state that appropriate response actions have been completed. NAVFAC, in coordination with the installation, must prepare the site(s) as NFRAP. The installation must ensure public notification by placing the NFRAP documentation in the information repository and by publishing the documentation's availability.

10214. FFAs/IAGs

1. The Marine Corps must enter into an FFA at its NPL sites as early as possible after it becomes apparent that an RI/FS is required. FFAs at NPL sites must outline and clearly state mutual obligations regarding the working relationship between states, the EPA, and the Marine Corps.

2. NAVFAC, in coordination with the installation, will negotiate FFAs and State Remediation Agreements. The ASN(I&E) will sign the FFAs and State Remediation Agreements. NAVFAC will prepare final agreements in coordination with the installation. Before the ASN(I&E) can endorse the final agreements, signatures must be obtained from the following: the installation CG/CO, NAVFAC, the CMC (CL), and the CMC (LF).

3. For purposes of meeting the IAG requirement, the FFA transitions into an IAG once the ROD is signed and new schedules are negotiated for the actual RA. There is no IAG requirement for a No-Action ROD.

10215. MARINE CORPS AS A PRP. Historically, the Marine Corps has contracted with private companies to transport and dispose of HW generated at its installations. Many of the third-party disposal sites selected by contractors are threatening or contaminating the environment and require cleanup. Upon receipt from the EPA or state authorities of a formal notice that a Marine Corps installation is involved in a site as a PRP, the installation must notify, by message, its chain of command, the REC, COMNAVFACENGCOM, cognizant NAVFAC FEC, CMC (LF), CMC (CL), and the appropriate counsel office (e.g., Eastern Area Counsel Office, Western Area Counsel Office, and/or installation counsel). The message shall describe the salient points of the notice. Simultaneously, the installation will mail a copy of the notice and other appropriate documents to the same addressees. NAVFAC shall take the lead role in negotiating with EPA, the U.S. Attorney's Office, and the PRP Steering Committee. NAVFAC shall cooperate with the other parties involved in the site response and provide requested information.

10216. STATE LAWS. Marine Corps policy is to comply with all state laws consistent with references (a), (b), and (e). In states with a mini-superfund law, the Marine Corps may find it advantageous to negotiate a FFSRA for non-NPL sites. NAVFAC, in coordination with the installation, will negotiate FFSRAs.

The ASN (I&E) will review and sign the final agreement. Cleanup of RCRA corrective action sites will follow state laws and regulations.

10217. COORDINATION WITH OTHER ENVIRONMENTAL REGULATIONS. Although ER Program actions that are consistent with section 121 of reference (a), and those that occur entirely on site are exempt from obtaining Federal, state, or local permits, inter-agency coordination is often required to ensure consistency with ARARs or other environmental laws. RPMs must solicit early involvement of other Marine Corps/Navy specialists, including natural and cultural resources personnel to ensure that section 7 of reference (v), section 106 of reference (w), and related requirements are identified and completed. These requirements may occur at any phase of an ER Program investigation including PA/SI, RI/FS, removal action, or RA.

10218. PERCHLORATE RELEASES

1. In accordance with DOD and HQMC perchlorate release management policies, perchlorate releases at ER sites shall be addressed in the same manner as other contaminants of concern. Marine Corps installations shall conduct site-specific risk assessments and any necessary response actions in accordance with reference (a) and (g), DERP, other applicable laws, consistent with the DOD relative ranking system for DERP sites.

2. Based on the EPA's Interim Drinking Water Health Advisory for perchlorate, the recommended preliminary remediation goal (PRG) is 15 parts per billion (ppb) where there is an actual or potential drinking water exposure pathway and where no ARARs exist under Federal or state laws. The PRG may be used for initial screening of remedial alternatives and project scoping as described in reference (g), the preamble to reference (g), and reference (x). Unless modified by EPA in the Integrated Risk Information System database, the perchlorate reference dose of 0.0007 mg/kg/day is appropriate for use in determining risk in site-specific human health risk assessments developed in accordance with reference (g).

3. Installations shall enter all perchlorate sampling data into DOD's perchlorate database annually.

10219. FUDS. FUDS differ from PRP sites in that FUDS are not identified as part of the EPA Superfund and are located on property formerly owned or operated by the DOD. The U.S. Army Corps of Engineers (USACE) is responsible for the FUDS Program. The Marine Corps responsibility for FUDS that were formerly Marine Corps sites is informational only. Should local interest arise, questions regarding the status of FUDS should be passed to appropriate USACE officials. In special circumstances, authority can be obtained from the USACE to address FUDS located on property that had been owned or operated by the Marine Corps. If an installation becomes aware of possible contamination at these properties (e.g., receives inquiries), forward the inquiries to the USACE.

10220. REAL PROPERTY TRANSACTIONS AND MANAGEMENT. NAVFAC shall consider the ER Program before any real property transactions and as part of all land management decisions.

1. Acquisition. The Marine Corps does not acquire known contaminated property without careful consideration of the cleanup liability involved. The Marine Corps should acquire contaminated property only in cases of the most critical operational necessity, and only with approval from Headquarters to ensure insertion of incurred cleanup liabilities into the ER Program.

(a) From Federal Agencies. Although DOD policy requires that a Component acquiring known contaminated real property will normally assume the responsibility for managing restoration actions at the property, Marine Corps policy is to try to negotiate a transfer agreement that leaves the funding and management of restoration actions of the property with the transferring Component. In either case, transfer agreements must clearly assign continuing responsibility for cleanup after the transfer. Where Marine Corps assumes the funding and management of restoration activities, the transferring Component is responsible for providing the Marine Corps with all reports and a history of restoration actions taken prior to the transfer of the property, and if appropriate, for transferring the cleanup funding as planned for the property in the Future Years Defense Program. The Marine Corps will not accept property from a non-DOD Federal agency unless the agency certifies it has met the requirements of section 120(h) of reference (a) and provides supporting reports and documentation.

(b) From Private Parties. Acquisition of contaminated property from private parties is not encouraged. Where such acquisition is operationally necessary, Marine Corps should negotiate cleanup costs as an offset to the purchase price. Marine Corps must carefully balance operational requirements for the property against any cleanup liability that will come with it.

2. Lease/Transfer/Disposal. For non-BRAC property, NAVFAC shall prepare an Environmental Condition of Property (ECP) for all leases, easements, transfers, and disposals of Marine Corps real property. Where appropriate, an ECP should be prepared for other actions involving the use of real property, e.g., licenses, depending on such factors as proposed use, the term of the use, and the presence of any contaminants on the property. For BRAC property, the BRAC PMO shall prepare a Finding of Suitability for Transfer (FOST) or Lease (FOSL). In the preparation of these documents, the Marine Corps shall consult with Federal, state, and local regulators as necessary and appropriate (e.g., the EPA where the parcel involved is part of an NPL site).

3. Contamination On Marine Corps Property Scheduled For Non-BRAC Disposal. The Marine Corps shall clean up contamination on Marine Corps property scheduled for non-BRAC disposal using ER,N funds following the normal ER,N prioritization process of worst-first/risk management. ER,N-funded cleanup activities will not be accelerated solely to accommodate the property disposal schedule.

10221. CONSTRUCTION ON CONTAMINATED PROPERTY. All efforts must be made to ensure that Marine Corps projects are not constructed on contaminated sites. However, there may be times when the project is being planned or is underway and contamination is discovered.

1. If contamination is discovered during the planning stage, NAVFAC can investigate and determine the need for clean up using ER,N funds and following ER procedures. However, the site investigation/clean up must compete with

other ER sites based on risk management. In most cases, this will take several years and the site may not be available in time for the project.

2. If contamination is discovered during construction and it is DERP eligible, NAVFAC can carry out the site investigation/cleanup using ER,N funds. However, the site will compete with other ER sites based on risk management. If ER,N funding is not available in time to meet the construction schedule, the installation must use project funds to investigate/clean up the site. If neither ER,N nor project funding is available in time to meet the construction schedule, the installation must stop the project altogether or re-site it. An installation does not have an option to pay for any DERP-eligible work with installation OM,N funds except to accomplish DERP-eligible work within the scope of an OM,N funded construction project.

10222. GOCO PLANTS. The Marine Corps' liability and responsibility for cleanup of sites at GOCO facilities flows from its status as owner of the facility. Past and present contractors share this liability since they are operators or generators at these facilities. Marine Corps policy shall require GOCO contractors to pay for all cleanup costs associated with their operation of Marine Corps facilities, unless contractual provisions state otherwise. Marine Corps actions to fulfill its responsibilities per reference (a) shall be consistent with its contractual requirements with the GOCO contractor. Failure to coordinate may result in a claim by the operating contractor under a Marine Corps contract or loss of potential claims by the Marine Corps against the operator. See reference (d) for additional information.

10223. FINES AND PENALTIES. The installation commanding officer (CO) shall not pay fines and penalties assessed concerning ER work that is currently ER,N funded or planned for future ER,N funding, from installation operating accounts. Upon receipt of a NOV or non-compliance that proposes to assess a fine or penalty relating to work that is ER,N-eligible, the installation shall immediately forward the notice to NAVFAC for action. Installations shall pay fines and penalties related to ongoing HW operations (actions that are not eligible for ER,N funding) from the installation's operating account. Where the Marine Corps agrees to pay any fines and penalties arising under ER,N funded work, the Marine Corps will submit these fines/penalties to Congress for authorization in the first available budget window. This is the case for ER,N work conducted under either references (a) or (c). The funding source (i.e., ER,N) drives the notification requirement, not the particular law under which the work is performed.

CHAPTER 10

ENVIRONMENTAL RESTORATION (ER) PROGRAM

SECTION 3: RESPONSIBILITIES

10300. CMC (LF)/COMMANDER MCICOM

1. Provide support to Marine Corps installations in interpreting Federal, state, and local environmental regulatory requirements and in uniformly applying Marine Corps policy as set forth in this Manual.
2. Assist installations with resolving disputes with Federal, state, and local regulatory agencies as required.
3. Coordinate with the Office of Chief Naval Operations (CNO (N-45)), COMNAVFACENGCOM, and the geographical FEC to ensure equitable and timely allocation of funding from the ER,N cleanup accounts and to support remediation of HS releases at Marine Corps installations consistent with CERCLA, RCRA, and the NCP.
4. Provide oversight for the implementation of the ER Program for active Marine Corps installations worldwide, to include:
  - a. Ensuring that installations identify ER Program requirements to the cognizant FECs.
  - b. Ensuring that program information and guidance are passed to the installations.
  - c. Ensuring that installations coordinate installation cleanup planning, programming, budgeting, and execution with their FEC.
  - d. Ensuring that installations fulfill their responsibilities under the Marine Corps ER Program and appoint an ER Coordinator.
  - e. Ensuring that public involvement and other legal requirements are met at installations with ER sites.
  - f. Ensuring that installation budgets reflect resource requirements to support the ER Program.
5. In conjunction with the Office of Legislative Affairs and (OASN(EI&E)), monitor proposed Federal environmental legislation for impact on Marine Corps operations and programs, and review the efforts of the Deputy Under the Secretary of Defense, Environmental Security to generate service input to congressional staff in the development of responsible and workable legislative proposals. Participate in the preparation of the DERP annual report to Congress.
6. After receiving and reviewing an endorsed FFA or state remediation agreement, provide the agreement to the OASN(EI&E) for signature.

7. Ensure that coordination occurs, as appropriate, with the Safety Office in matters relating to HS releases and safety and health training.
8. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to environmental regulations.

10301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Develop base orders, or an ECPSOP document to implement the specifications set forth in this chapter.
2. Notify the NRC, as well as appropriate state and local authorities, as soon as there is knowledge of an HS release in excess of a RQ at, or migrating from, the installation.
3. Ensure that all applicable statutory and regulatory requirements including safety and health training (for installation personnel) and natural resources are met during site assessment and response actions.
4. Provide necessary review and comment on ER action plans and reports to the cognizant FEC.
5. Forward appropriate ER documents to the EPA and state regulatory agencies. Forward all final primary documents to the EPA and state regulatory agencies prior to deadlines in either FFAs or state agreements or orders.
6. Budget for and conduct any operation and maintenance or long-term monitoring after these requirements are no longer eligible for ER,N funding, five years after RC.
7. Provide an ER coordinator and logistic support for ER projects at the installation.
8. Establish and conduct periodic meetings of the TRC or RAB, when appropriate.
9. Provide information as required for updating project exhibits to cognizant FECs for ER Program studies and RAs.
10. Provide information as required to the CMC (LF) for ER Program salaries, support, travel, and training costs.
11. Prepare and implement a public involvement program, including a CIP, for ER Program sites.
12. In conjunction with the FEC, select the remedy and sign the ROD/decision documents for all ER Program sites.
13. Participate in negotiations of FFAs and state agreements.
14. Notify appropriate commands of any EPA or state notice or PRP action, and support PRP response. Track actions by FECs on behalf of the command regarding

PRP suits.

15. Ensure that ER Program site conditions are considered prior to land use planning, development, or operations, especially in reference to MILCON.

16. Ensure that appropriate information is placed in the information repository.

17. Inform the public of the availability of technical assistance grants for installations on the NPL and other technical assistance programs designed to enhance public involvement.

18. Endorse and forward FFAs or state remediation agreements to the CMC (LF).

19. Identify and submit to the CMC (LF) project documentation and funding requests for ER that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with ER Program requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

10302. COMNAVFACENGCOM

1. Operate the routine aspects of the ER Program for the Marine Corps, in coordination with the Marine Corps installation and the CMC (LF), including the necessary overall planning, programming, budgeting, and execution.

2. Provide contract services to support technical aspects of the ER Program at Marine Corps installations. Facilitate the development and use of innovative remediation technologies.

3. Conduct BRAC ER activities at closing and realigning installations by:

a. Planning, programming, and executing activities that support property reuse, using the results of relative risk site evaluations, and other criteria to meet Defense Planning Guidance program goals.

b. Measuring program progress through the reduction of relative risks at sites, the progression of sites through the restoration phases, the accomplishment of milestones leading to site completion, and the acres of land environmentally suitable for transfer.

4. Conduct the Fast-Track Cleanup program to expedite the restoration and transfer or lease of property at closing or realigning installations. This procedure includes improving the efficiency of the ER process, partnering with Federal, state, and local regulatory agencies, and working with local communities and other stakeholders.

5. Perform ER studies and remedial action projects and prepare NFRAP documentation by contract, in-house effort, or a combination thereof.

6. Coordinate, at all stages, with regulatory agencies and installation CGs/COs prior to initiating projects through project completion.
7. Ensure that ER work plans and ecological risk assessments are reviewed by health and safety and natural resources professionals affiliated with the site.
8. Integrate the relative risk concept into ER Program planning and execution in accordance with the DOD Risk-Based Site Evaluation Primer.
9. Provide support to the DSMOA program by reviewing work plans, documents, and progress reports, and by forwarding budgeting requirements.
10. Prepare project plans and reports in coordination with the installation, prepare contract documents, coordinate review and comments, and distribute final documents to installations.
11. Track project progress to meet schedule requirements and provide technical and financial oversight during project performance.
12. Prepare the ROD document and forward it to the installation CG/CO with a recommended alternative for review and signature.
13. Ensure that the ER database is updated quarterly for Marine Corps installations. FECs should provide the installation with a chance to review database information prior to the quarterly update.
14. Support the installation in fulfilling its TRC/RAB responsibilities.
15. Maintain the AR and distribute copies to the installation and appropriate parties.
16. Provide ER study results to Marine Corps environmental planning, real estate, and natural resources personnel. Work with the Marine Corps chain-of-command to ensure that other Marine Corps programs and projects account for HS site conditions before irreversible decisions are made.
17. Provide site-specific technical, progress, and budgeting information to satisfy program reporting requirements and to provide semi-annual ER Program execution plans to the CMC (LF).
18. Review and update, in coordination with the installation, the Federal Agency HW Compliance Docket and upgrade repository information.
19. Upon receipt of a notice, message, or documentation from the Marine Corps installations regarding notification of PRP action, the FECs will:
  - a. Prepare and submit substantive responses to the EPA and state inquiries related to the HW site and subsequent cleanup.
  - b. Meet with other PRPs and the EPA and state representatives to plan for remediation.
  - c. Negotiate and, on behalf of the Navy, execute agreements relating to

PRP remediation. Prior to execution, forward proposed agreements to the CMC (LF) for review and to the involved Marine Corps command(s) for information.

d. Administer remediation agreements, to include payment of costs borne by the ER,N.

20. The FEC, in close coordination with the installation and the appropriate Marine Corps Counsel Office, will negotiate FFAs and state remediation agreements. The final draft will be endorsed by the CMC (LF), NAVFAC, and forwarded to the Marine Corps installation for endorsement and resubmittal to the CMC (LF).

10303. BRAC PMO

1. Establish property disposal strategies and cleanup levels to facilitate property disposal.
2. Direct, review, and approve the RPM's base specific plans, schedules, and requirements for environmental cleanup documentation and actions.
3. Establish priorities and direct, review, and approve the RPM's environmental cleanup actions in coordination with property disposal.
4. Serve as primary Navy/Marine Corps interface with environmental regulators about BRAC cleanup plans and actions in close coordination with the Deputy Assistance Secretary of the Navy for Environment.

10304. BRAC ENVIRONMENTAL COORDINATORS

1. Contact or maintain contact with the appropriate EPA Regional Office and state environmental regulatory agency and form/lead the BRAC Cleanup Team (BCT).
2. In conjunction with the other members of the BCT, conduct a "Bottom Up" review of the environmental cleanup programs and implement necessary action plan(s). The "Bottom Up" review will include an evaluation of the existing environmental programs such as the ER Program.
3. Prepare and update, as needed, a BRAC Cleanup Plan that supports the Community Reuse Plan.
4. Implement all ER Program projects related to closure in an expeditious and cost-effective manner in accordance with the BCP.
5. Negotiate appropriate cleanup and abatement actions with EPA and state BCT members.
6. Identify resource requirements for ER and abatement actions.
7. Act as the liaison/coordinator with appropriate installation commanders and headquarters components with regard to closure-related environmental compliance matters.
8. Serve as co-chairman of the RAB with community representative, as agreed to by the installation CG/CO and the CO of the NAVFAC Command (FAC) or FEC.

9. Act as liaison to the DOD Transition Coordinator on environmental matters affecting the leasing or conveyance of property (e.g., cleanup schedules and priorities, cleanup actions and levels, reports to community leaders on cleanup, and/or possible impediments to a lease or conveyance).
10. Provide direction on the use of appropriate environmental funds to accomplish cleanup and abatement actions within available resources.
11. Propose and implement changes to existing cleanup agreements, orders and decrees, and other environmental procedures to achieve timely and cost-effective cleanup.
12. Serve as the Program Manager where the installation has an FFA, FFSRA, IAG, or other regulatory cleanup agreement, order, or decree.
13. Sign the ROD for cleanup actions under CERCLA.
14. Sign the decision documents for corrective actions related to cleanup under RCRA (includes pre-operational closure documents).
15. Sign decision documents for removal actions under CERCLA (includes pre-operational closure documents).
16. Sign the decision documents for corrective actions related to cleanup under applicable state laws, regulations, and programs.
17. Sign uncontaminated parcel determinations under reference (f).
18. Provide input to the FOSL and FOST.
19. Establish and maintain the AR File and public involvement procedures required under reference (a).
20. Establish and maintain the AR Files of all other actions taken with regard to the cleanup of the installation.
21. Maintain an awareness of the status of site activities and intervene as warranted to ensure expeditious project completion.
22. Integrate property transfer priorities into the ER Program.
23. Certify that construction projects requested by lessees will not interfere with the ER Program.
24. Sign Environmental Baseline Survey for Transfer, Environmental Baseline Survey for Lease, and Engineering Change Proposal documents.
25. Initiate any other innovative ideas that will accelerate the cleanup and transfer of excess Marine Corps property and are consistent with the intent of this appointment.
26. Conduct five-year reviews of RAs pursuant to section 121(c) of reference (a) and sign five-year review reports.



REFERENCES

- (a) 42 U.S.C. 9601 et seq.
- (b) Public Law 99-499
- (c) 42 U.S.C. 6901 et seq.
- (d) OPNAVINST 5090.1C
- (e) Navy Environmental Restoration Program (NERP) Manual, August 2006
- (f) Public Law 102-426
- (g) 40 CFR 300
- (h) 33 U.S.C. 1321
- (i) 40 CFR Parts 260 - 280
- (j) 10 U.S.C. 2710
- (k) Public Law 100-526
- (l) Public Law 100-510
- (m) Navy Memo, "Assignment of Responsibilities to the BRAC PMOs and Delegation of Authority to Execute Those Responsibilities," November 29, 2004
- (n) CERCLA/Superfund Orientation Manual, EPA/542/R-92/005, October 1992
- (o) Federal Register, Volume 70, Number 18, January 28, 2005
- (p) 29 CFR 1910
- (q) 32 CFR 179
- (r) 40 CFR 302
- (s) 42 U.S.C. 2011 et seq.
- (t) DOD's Risk-Based Site Evaluation Primer, 1994
- (u) Executive Order 12580, "Superfund Implementation," January 23, 1987
- (v) 16 U.S.C. 1531 et seq.
- (w) 16 U.S.C. 470 et seq.
- (x) Risk Assessment Guidance for Superfund Volume I, Part B (EPA/540/R-92/003, Pub. 9285.7-01B, Dec. 1991)

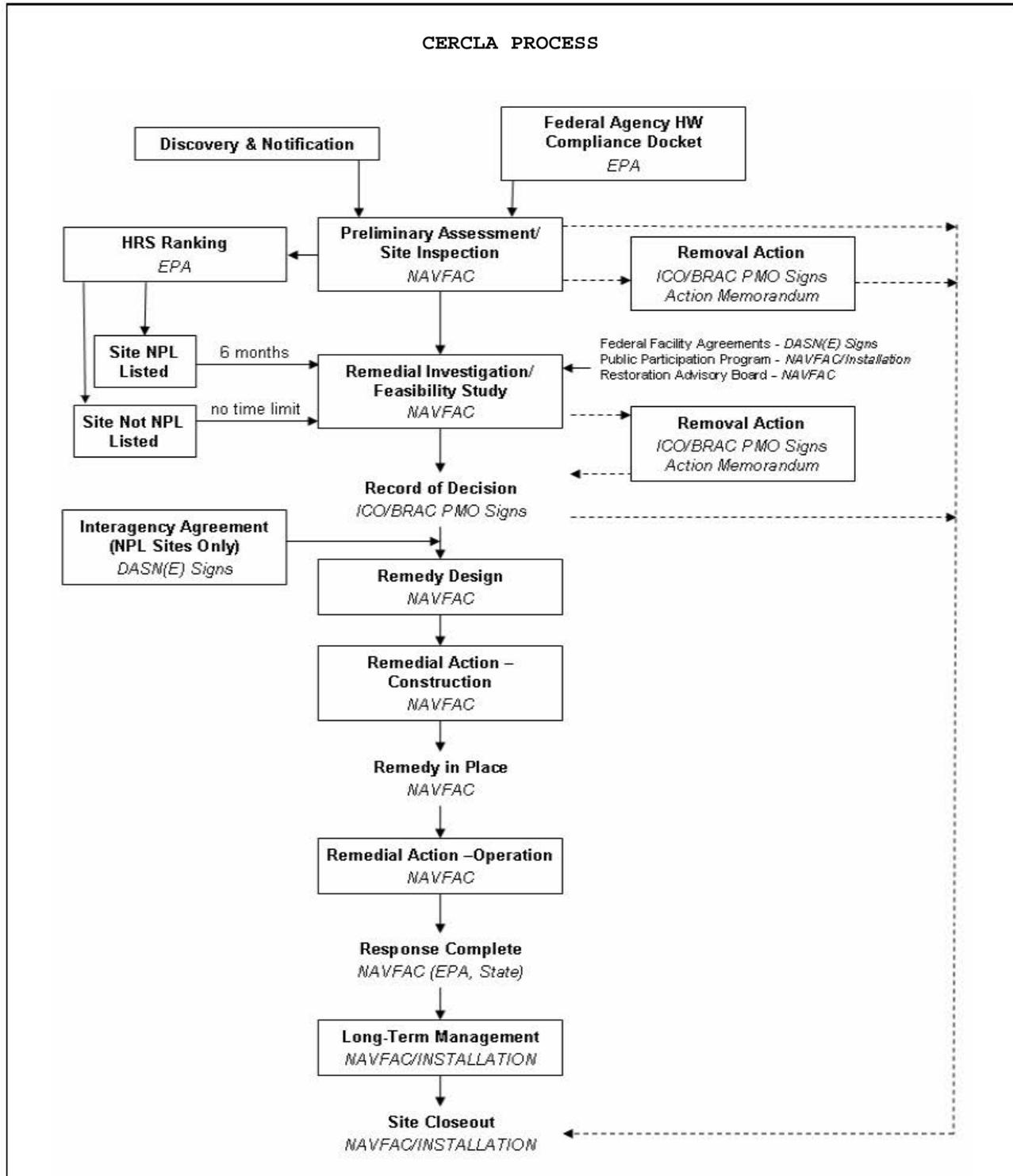


Figure 10-1.--Environmental Restoration (ER) Program CERCLA Process

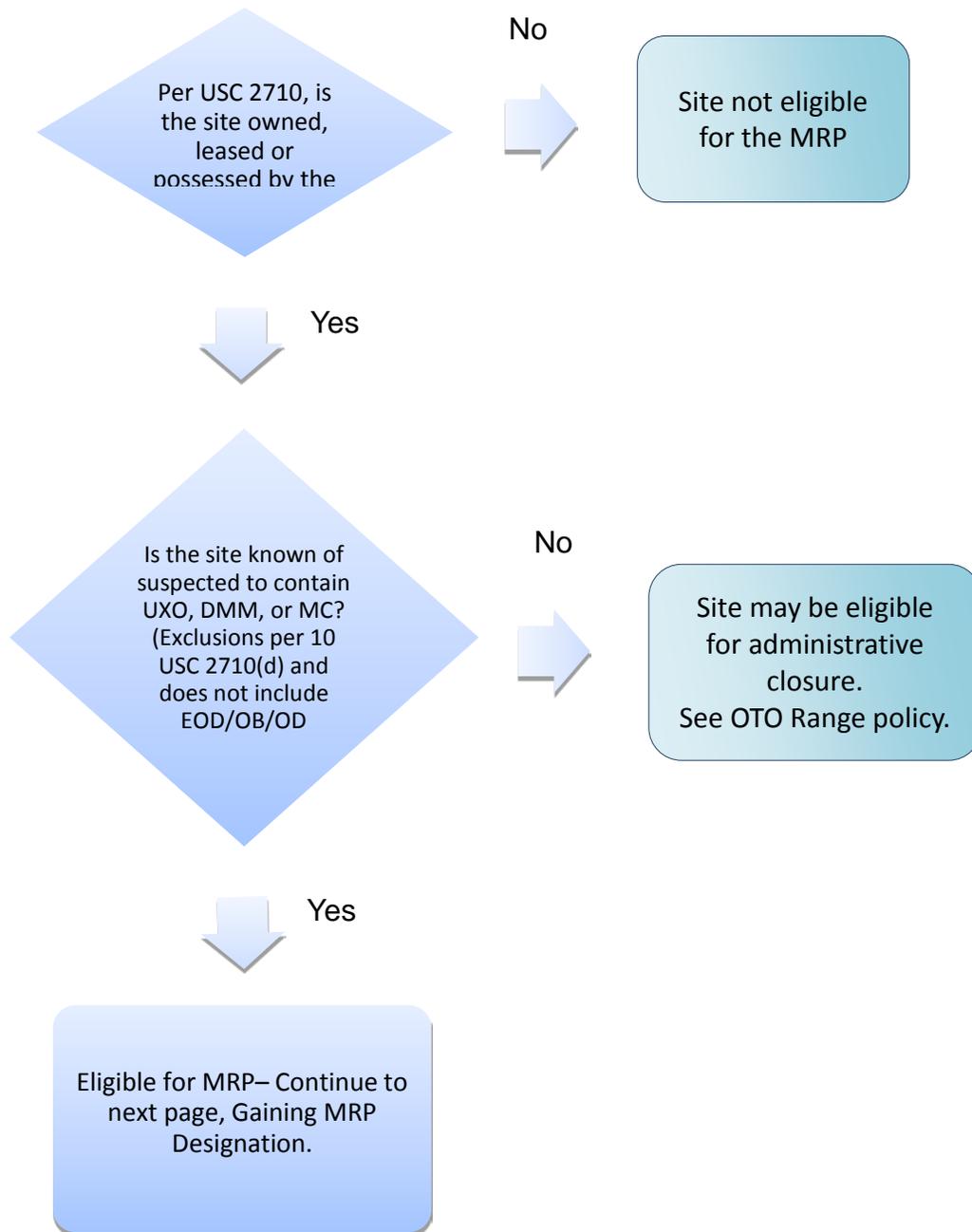


Figure 10-2.--Determining Eligibility for the MRP and Gaining MRP Designation

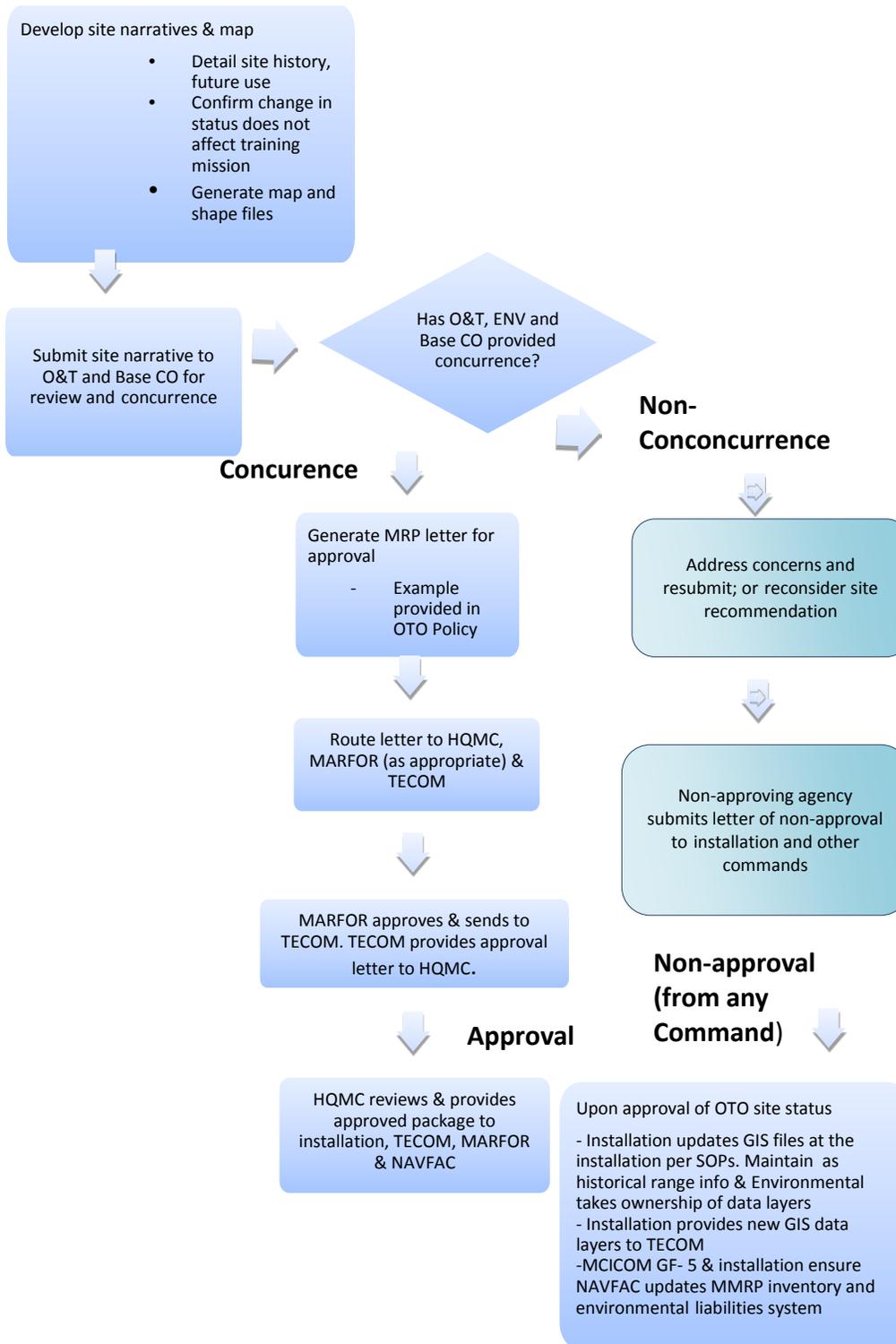


Figure 10-3.--Gaining MRP Designation

CHAPTER 11

NATURAL RESOURCES MANAGEMENT

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CHAPTER 11

NATURAL RESOURCES MANAGEMENT

SECTION 1: INTRODUCTION

11100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with procedural and statutory requirements for managing natural resources at Marine Corps installations. This chapter summarizes the Natural Resources Management Program, which consists of land management, fish and wildlife management, forest management, and resource-based outdoor recreation management.

11101. APPLICABILITY. See paragraph 1101.

11102. BACKGROUND. The making of Marines requires extensive training. Marines train as they fight, and that training requires access to land. Training can be destructive to land and natural resources. Unless properly managed, Marine Corps lands can become damaged to the point where realistic training can no longer occur. In addition, the American people have placed intrinsic values on certain natural resources. These values are manifested in laws requiring the Marine Corps to protect and conserve natural resources. Failure to comply with natural resources laws can lead to judicial, legislative, and executive decisions denying the Marine Corps access to land for training. Accordingly, installation and unit commanders must work to guarantee continued access to our land, air, and water resources for realistic military training and testing by ensuring that the natural resources entrusted to the Marine Corps remain healthy and available for future generations.

11103. FEDERAL STATUTES AND E.O.s (Of the following list of statutes and E.O.s, only items 9, 19, 25, 26 and 29 apply to overseas installations.)

1. Bald Eagle Protection Act of 1940, as Amended (16 U.S.C. 688 et seq.). The act prohibits taking, possessing, and transporting bald eagles and golden eagles and importing and exporting their parts, nests, or eggs. The definition of "take" includes pursue, shoot, shoot at, poison, wound, capture, trap, collect, molest, or disturb. The act also provides for penalties of up to \$5,000 for possessing eagles or eagle parts taken from birds after June 1940. Regulations implementing the act are found at 50 CFR Part 22.

2. Clean Water Act (CWA) of 1977, as Amended (Public Law 95-217, 33 U.S.C. 1251 et seq.). The CWA, in part, requires Federal agency consistency with state nonpoint source pollution management plans. The CWA and its implementing regulations also require permits for controlling wastewater discharges and placing fill materials into waters of the United States, including wetlands. These permits are required before initiating proposed actions.

3. Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. 1451 et seq.). The CZMA requires that, to the maximum extent practicable, Federal actions affecting any land/water use or coastal zone natural resource be implemented

consistent with the enforceable policies of an approved state coastal management program. The CZMA also authorizes states to administer approved coastal nonpoint source pollution programs. Advance concurrence from the state Coastal Commission is required before taking an action affecting the use of land, water, or natural resources of the coastal zone. Excluded from the coastal zone are lands solely subject to or held in trust by the Federal Government, its officers, or its agents.

4. Conservation Programs on Military Reservations (Sikes Act) of 1960, as Amended (16 U.S.C. 670(a) et seq.). The Sikes Act requires each military installation to manage natural resources for multipurpose uses and public access appropriate for those uses, as well as ensuring no net loss to training, testing or other defined missions of the installation. Management of these resources is accomplished through development and implementation of an INRMP. Each INRMP must be prepared in consultation with the USFWS and the cognizant state fish and wildlife agency. The public must be afforded an opportunity to review and comment on INRMPs prior to their finalization. The Sikes Act also requires, to the extent practicable using available resources, sufficient numbers of professionally-trained natural resource management personnel and natural resources law enforcement personnel, be available and assigned responsibility to perform tasks necessary to carry out Title I of the Sikes Act, including preparing and implementing INRMPs.

5. Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901-3932). The act promotes wetlands conservation for the public benefit and helps fulfill various migratory bird treaty obligations.

6. Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.). Implemented by 50 CFR 402 and 50 CFR 17, the ESA requires Federal agencies to carry out programs to conserve Federally-listed endangered and threatened plants and wildlife. Development and implementation of these programs must be carried out with the consultation and assistance of the Departments of the Interior (DOI) and Commerce. Preparation of a biological assessment may be required to determine whether formal consultation with the FWS/National Oceanic and Atmospheric Administration - Fisheries (NOAA Fisheries) is necessary and/or may serve as a basis for a FWS/NOAA Fisheries biological opinion.

7. Estuarine Areas Act (16 U.S.C. 1221-1226). The act provides for a Federal study and inventory of estuaries and authorizes their management and development through Federal and state agreements.

8. Plant Protection Act (7 U.S.C. 7701 et seq.). Consolidates and modernizes all major statutes pertaining to plant protection and quarantine.

9. Strengthening Federal Environmental, Energy, and Transportation Management (E.O.) 13423, 24 January 2007). Sections 2(d) and 3(a) of this E.O. require the use of sustainable environmental practices and energy efficiency, GHG emissions avoidance or reduction, and renewable energy.

10. Marine Mammal Protection Act (MMPA) of 1972, as Amended (16 U.S.C. 1361 et seq.). Implemented by 50 CFR 18, 215, and 228, the MMPA mandates a moratorium on the killing, capturing, harming, and importing of marine

mammals and marine mammal products. The MMPA also prohibits the taking of any marine mammal by any person, vessel, or conveyance subject to the jurisdiction of the United States on the high seas or the taking of any marine mammal by a person, vessel, or conveyance in waters or lands under the jurisdiction of the United States. "Taking" means to harass, hunt, capture, collect, or kill any marine mammal, and the term includes, without limitation, any of the following: collection of dead animals or their parts, restraint or detention of a marine mammal, tagging a marine mammal, the negligent or intentional operation of an aircraft or vessel, or doing of any other negligent or intentional act that results in the disturbing or molesting of a marine mammal.

11. Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as Amended (33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.). The MPRSA establishes regulations relating to dumping specific materials into open waters and establishes a program for designating and regulating national marine sanctuaries.

12. Migratory Bird Treaty Act (MBTA) of 1918, as Amended (16 U.S.C. 703 et seq.). The MBTA protects migratory birds (listed in 50 CFR 10.13) and their nests and eggs and establishes a permitting process for the taking of migratory birds.

13. Military Reservation and Facilities: Hunting, Fishing and Trapping Act of 1958 (Public Law 85-337, 10 U.S.C. 2671). The act requires all hunting, fishing, and trapping on each military installation be in accordance with the state fish and game laws where the installation is located. Appropriate state licenses must be obtained for these activities on the installation, but the act permits an installation commander to exempt active duty military personnel from state licenses to hunt, fish, and trap on a military installation if the state does not permit them to obtain a resident license.

14. Sale of Certain Interests In Lands; Logs (10 U.S.C. 2665). This law establishes requirements for installation sale of forest products.

15. Leases: Non-Excess Property of Military Departments (10 U.S.C. 2667). This law permits installations to lease real or personal government property, including land leased for agricultural purposes.

16. NEPA of 1969 (42 U.S.C. 4321 et seq.). The NEPA requires consideration of environmental concerns during project planning and execution. The NEPA and the Council on Environmental Quality (CEQ) implementing regulations (40 CFR Part 1500) require Federal agencies to prepare an Environmental Assessment or Environmental Impact Statement for Federal actions with the potential to significantly affect the quality of the human environment, including natural and cultural resources.

17. Fish and Wildlife Conservation Act (FWCA) of 1980 (16 U.S.C. 2901 et seq.). The FWCA promotes state programs for conserving nongame fish and wildlife, their habitats, and their use.

18. Plant Quarantine Act (7 U.S.C. 151-167). The act regulates the importation and movement of nursery stock and other plants and plant products

within the United States to control injurious plant and pest transportation.

19. Protection of Wetlands (E.O. 11990, 24 May 1977). This E.O. addresses Federal agency actions required to identify and protect wetlands, minimize the risk of wetlands destruction or modification, and preserve and enhance the natural and beneficial values of wetlands.

20. Floodplain Management (E.O. 11988, 24 May 1977). This E.O., in part, requires each Federal agency to evaluate potential effects of actions that it may take in a floodplain and ensure that its planning programs and budget requests reflect consideration of flood hazards and floodplain management.

21. Outdoor Recreation - Federal/State Program Act (16 U.S.C. 460(L) et seq.). The act encourages consultation with the United States National Park Service regarding outdoor recreation management.

22. Rivers and Harbors Act (33 U.S.C 401). The act, in part, prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waters of the United States without Congressional approval.

23. Soil Conservation Act (16 U.S.C. 590a et seq.). To control and prevent soil erosion, the act ensures that programs administered by the Secretary of Agriculture for the conservation of soil are responsive to the long-term needs of the United States.

24. Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1009). To preserve and improve land and water resources and the quality of the environment, the act authorizes Federal assistance to local organizations for flood prevention and the planning and completion of projects in watershed areas for conservation and land and water use.

25. Exotic Organisms (E.O. 11987, 24 May 1977). This E.O., in part, requires Executive agencies, to the extent permitted by law, to restrict the introduction of exotic species into the natural ecosystems on lands and waters they own, lease, or hold.

26. Invasive Species (E.O. 13112, 3 February 1999). This E.O.'s purpose is to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause.

27. Farmland Protection Policy Act (7 U.S.C. 4201-4209). The act encourages Federal agencies to take steps to ensure their actions do not cause United States farmland to be irreversibly converted to nonagricultural uses.

28. Responsibilities of Federal Agencies to Protect Migratory Birds (E.O. 13186, 10 January 2001). This E.O., in part, requires each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement, within two years, a MOU with FWS that shall promote the conservation of migratory bird populations.

29. Use of Off-Road Vehicles on the Public Lands (E.O. 11644, 9 February 1972). This E.O., in part, establishes policies and provides for procedures

for ensuring off-road vehicle use on public lands will be controlled and directed to protect natural resources.

30. Superfund Implementation (E.O. 12580, 23 January 1987), as amended by E.O. 12777 (18 October 1991). This E.O. delegates to various Federal officials the responsibilities vested in the President for implementing CERCLA.

11104. REQUIREMENTS. With the exception of subsections 1a, 1f, 1g(2) and 1i, the guidance in paragraph 11104 does not apply to overseas installations.

1. Natural Resources Management. Each Marine Corps installation shall manage its natural resources to provide for sustained military use of the land.

a. INRMPs. Each installation having custody of property (i.e., land and water) suitable for the conservation and management of natural resources shall prepare, or ensure preparation of, and implement a comprehensive INRMP that includes all elements of natural resources management applicable to the installation. INRMPs must be prepared by professionally-trained personnel and must address compliance with legal mandates protecting specific natural resources. Each installation, as applicable, shall continuously monitor its INRMP implementation and review its INRMP annually. Each installation, as applicable under the Sikes Act, shall also revise and/or reapprove its INRMP at least every five years. For more information, see paragraph 11200.4 of this chapter.

b. Pesticide Use in Natural Resources Management Programs. Pesticide use, storage, application, and disposal, in support of installation natural resources management activities shall comply with reference (a) and applicable occupational safety and health requirements. Each installation shall use the principles of Integrated Pest Management (IPM) to avoid and minimize the use of pesticides when nonchemical alternatives are available and cost effective.

c. Public Access Associated with the Natural Resources Management Program. Marine Corps lands will be available to the public for enjoyment and use of natural resources, except when a specific determination has been made by the installation CG/CO that a military requirement prevents such use for safety or security reasons, or when such use would cause substantial environmental degradation. A nonaccess or limited access determination will be explained in the installation's INRMP.

d. Access by Federal and State Conservation Officials. Federal, state, and local officials will be permitted access to installation land and waters for official purposes after proper safety and security measures are taken.

e. Consistency with Coastal Zone Management Plans. Reference (b) requires each installation to ensure that its operations, activities, projects, and programs affecting the coastal zone in or on coastal lands or waters are consistent to the maximum extent practicable with the Federally-approved Coastal Zone Management Plan of the state. Installation natural

resources management planning shall comply with this requirement.

f. Protection of Coastal Barriers. Before construction, maintenance, military activities, implementation of natural resources management projects, or other Federal expenditures on coastal barrier islands, the Marine Corps will consult with the Secretary of the Interior to determine the impacts on these resources. In areas designated as coastal barriers, the Marine Corps may only expend funds for military activities essential to national security; projects for the study, management, protection, and enhancement of natural resources; scientific research; essential emergency actions; maintenance (but not expansion) of publicly-owned structures; and nonstructural projects for shoreline stabilization.

g. Exotic and Invasive Species

(1) Installations and units shall prevent the introduction of exotic species into any installation's natural ecosystem unless the Secretary of Agriculture or the Secretary of the Interior finds that such introduction will not have an adverse effect on those ecosystems.

(2) Installations and units shall not authorize, fund, or carry out actions likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere. They shall provide for invasive species control and minimize the economic, ecological, and human health impacts that invasive species cause. Installations and units with actions that may affect the status of an invasive species shall, to the extent practicable and permitted by law, identify such actions, and subject to the availability of appropriations, and within budgetary limits, use relevant programs and authorities to: prevent the introduction of invasive species; detect and respond rapidly to and control populations of such species in a cost-effective and environmentally-sound manner; monitor invasive species populations accurately and reliably; provide for restoration of native species and habitat conditions in ecosystems that have been invaded; conduct research on invasive species and develop technologies to prevent introduction, and provide for environmentally-sound control, of invasive species; and promote public education on invasive species and the means to address them.

h. Partnerships and Volunteer Programs. Installations may use appropriate partnerships and volunteers to enhance conservation programs whenever practicable. This work will be performed under the direction of professionally-trained natural resources personnel in accordance with reference (c).

i. Natural Resources Personnel. Personnel with natural resources responsibilities must, as a condition of employment, possess the appropriate knowledge, skills, and professional training/education to perform their duties. Installation commanders will provide natural resources personnel timely and necessary supplemental training to ensure proper and efficient natural resources management. Installation commanders will also maintain adequate natural resources staffing levels to provide and sustain installation natural resources.

## 2. Land Management

a. Wetlands Protection. The Marine Corps will obtain a CWA Section 404 permit from the USACE before discharging dredged or fill material into waters of the United States, including wetlands. The Marine Corps will comply with the national goal of no net loss of wetlands and will avoid loss of size, function, and value of wetlands. In addition, the Marine Corps will preserve and enhance the natural and beneficial values of wetlands while conducting its activities.

Installations, when engaged in an authorized activity that may or will result in the destruction of, or an adverse impact to, a wetland, may make payments to a wetland mitigation banking program or "In-Lieu-Fee" mitigation sponsor approved in accordance with references (d) or (e), and any implementing administrative guidance or regulation.

b. Nonpoint Source Pollution. The Marine Corps will comply to the extent permitted by law with state CWA nonpoint source pollution control requirements. Further, the Marine Corps will manage its lands and waters in accordance with reference (f), which requires installations to consider their proposed resource management activities within the broader context of the watershed where their activities are being contemplated.

c. Agricultural Outleasing. As part of the integrated management of natural resources, installation commanders shall review the suitability of their lands for agricultural leasing, under authority of reference (g) when such leasing is advantageous to the United States. Installation commanders should also review the suitability of existing leases to ensure they promote the national defense or are in the public interest and do not conflict with existing or planned military land use requirements. In addition, any agricultural leases must be compatible with the goals and objectives of the installation's INRMP.

d. Soil Conservation. The Marine Corps shall manage its lands and waters to control and prevent soil erosion, soil loss, and aquatic sedimentation and to preserve natural resources by conducting surveys and implementing soil conservation measures. Construction projects shall be designed to eliminate post construction soil erosion, and altered or degraded landscapes and associated habitats shall be restored and rehabilitated whenever practicable.

e. Farmland Protection. The Marine Corps shall identify prime and unique farmland and take into account the adverse effects of Marine Corps actions on farmland preservation. In reviewing its actions, the Marine Corps shall consider appropriate alternative actions to reduce such adverse effects and will ensure that such actions, to the extent practicable, are compatible with state and local government and private farmland protection programs and policies.

f. Control of Noxious Weeds. Installations shall implement control measures for Federally- and state-listed noxious weeds. Base Exterior Architecture Plans will include a list of prohibited noxious weeds for landscaping. Installations must also cooperate with state, county, and local

governments and easement holder management plans for controlling noxious plants provided that similar programs are being implemented generally on state or private lands in the same area.

g. Floodplain Management. As it implements land management, construction, and land use actions, the Marine Corps shall avoid direct and indirect floodplain development and shall restore and preserve the natural and beneficial values served by floodplains. Installations and units must evaluate the potential effects of proposed actions in floodplains according to the NEPA procedures described in chapter 12.

h. Wildfire Suppression and Prescribed Burning. Fire is an important component of fire-adapted ecosystems. These ecosystems may require some level of prescribed burning to mimic the temporal frequency and intensity of the natural fire regime. Burning outside the natural fire regime may impact or convert vegetation plant communities to a non-native type. Prescribed burning is an important tool to reduce fuel loading and maintain fire-dependent ecosystems. Accordingly, Marine Corps installations shall include fire management in their INRMP. Wildland fire response and prescribed burning shall be conducted in accordance with reference (h).

### 3. Fish and Wildlife Management

#### a. Endangered Species

(1) Each installation shall survey and take other appropriate actions to document the presence of candidate species and endangered or threatened species on the installation, and identify their currently used and periodically-or indirectly-used habitats. Each installation shall assist FWS in determining whether any such habitats may be included or excluded from critical habitat designation. Each installation shall also survey and take other appropriate actions to document the presence of state or territory rare and endangered species.

(2) The Marine Corps will consult with FWS or NOAA Fisheries (as appropriate) on any Marine Corps action that may affect any endangered or threatened species or critical habitat to ensure that such action is not likely to jeopardize the continued existence of the species or result in the destruction or adverse modification of critical habitat. Such consultations may be either formal or informal. When necessary, the Marine Corps will prepare a Biological Assessment of the effects of a proposed action on a listed species and/or its critical habitat to assist FWS or NOAA Fisheries in issuing a Biological Opinion on whether the action will jeopardize the continued existence of the species and/or adversely modify its critical habitat. In addition, the Marine Corps will further programs for the conservation of endangered and threatened species. Each installation supporting endangered or threatened species must address their management in its INRMP detailing protective measures that assure the continued health and viability of these species on the installation. Each installation will also assist FWS and NOAA Fisheries in preparing recovery plans for endangered or threatened species on the installation.

(3) Each installation shall designate an installation representative

to liaise with local governmental agencies and organizations interested in endangered and threatened species protection. The initial contacts shall include the local FWS field office, the local field office of NOAA Fisheries, and the state fish and wildlife agency.

b. Species at Risk. To the maximum extent practicable and where it does not conflict with the installation mission, each installation should survey and take other appropriate measures to identify, monitor and manage other species at risk (i.e. state listed species, International Union for Conservation of Nature (IUCN) Red List threatened or imperiled species).

c. Marine Mammals. The Marine Corps shall not take (e.g., harass, hunt, capture, or kill) marine mammals on the high seas or in waters or on land under the jurisdiction of the United States. The Marine Corps will evaluate each operation that may affect marine mammals and will avoid impacts to them. For actions with the potential for unintentional harm to marine mammals, application to NOAA Fisheries will be made for a Letter of Authorization or other permit to comply with MMPA requirements. In addition, many marine mammals are also endangered species, and proposed actions that may affect any Federally-listed threatened or endangered species require consultation under Section 7 of reference (i).

d. Migratory Birds. The Marine Corps shall consult with FWS during INRMP preparation to ensure that actions not directly associated with military readiness activities (e.g., training) are conducted in a manner that minimizes the taking of birds protected by reference (j) and listed in reference (k). While incidental take of migratory birds is authorized during the conduct of military readiness activities, the Marine Corps will discuss with FWS the impacts of such activities to migratory bird populations. Installations shall consult with local or regional FWS offices on proposed actions intended to take (e.g., banding or marking, scientific collecting) migratory birds, their young, or eggs. The lawful pursuit of migratory game birds is permissible in compliance with Federal, state, and local hunting regulations.

e. Hunting, Fishing, and Trapping Licenses. Installations allowing hunting, fishing, and trapping shall require all civilian hunters, fishers, and trappers to possess applicable state licenses for hunting, fishing, or trapping on the installation. Military personnel engaged in these activities must possess such licenses if the host state permits the issuance of a resident license to members of the military without regard to residency requirements. At installations within states that do not authorize licenses under the conditions noted herein, military personnel may, at the discretion of the installation CG/CO, hunt, fish, or trap with an installation permit in lieu of a state license.

f. Hunting, Fishing, and Trapping Access Fees. Each installation permitting hunting, fishing, or trapping may collect nominal fees for these recreational opportunities. Each installation should develop the permit fee schedule, in part, after considering cost associated with INRMP fish and wildlife enhancement operations.

g. Fish and Wildlife Management. Installations with INRMPs shall ensure

that professional services implement and enforce them. When procuring INRMP implementation and enforcement services, priority shall be given to Federal and state agencies having responsibility for the conservation or management of fish or wildlife.

#### 4. Forest Management

a. Management Requirements. As part of the integrated management of natural resources, installation commanders shall review the suitability of their lands for merchantable forest products. Installations containing forests or lands with the potential to grow and produce merchantable forest products shall ensure the optimum sustainable yield of forest products and the improvement of forest resources consistent with the military mission and local ecosystem condition. When appropriate, installation INRMPs will include current forest inventories, conditions, trends, and potential uses; silvicultural goals; maintenance of forested areas and access roads; forest and stand improvement methods; harvesting and reforestation methods and schedules; and protection and enhancement of other natural resources.

b. Forest Product Sales. Per references (l) and (m), Marine Corps contracts for the sale of timber and other forest products shall include requirements for orderly harvesting, operational and safety procedures, and payment. Forest products will not be donated; abandoned; carelessly destroyed; used to offset costs of contracts; or traded for products, supplies, or services. Proceeds collected from the sale of installation forest products shall be forwarded to the servicing Marine Corps accounting and finance officer. Each installation selling forest products shall maintain records of sales proceeds by fiscal year for use in identifying the host state's share of forest product sale proceeds (subsection (e)(1) of reference l)).

c. Accounting and Use of Forestry Proceeds. Installations incurring costs for the production of forest products shall be reimbursed from proceeds from forest product sales (subsection (d) of reference (l)). Reimbursable forest product costs, however, must be directly related to the economic production of forest products (i.e., directly related to forest enhancement, protection, conservation, and management). Insofar as they meet this test, forest product costs may also include funding forest management cooperative agreements and forest research agreements. Reimbursable production costs exclude expenses for the production of forests that are incapable of economic production of forest products.

d. Forest Pest Suppression. Installations with forest resources shall fully cooperate in the planning, coordination, and execution of field operations to prevent and suppress forest damage and insect and disease outbreaks. This cooperation, when determined to be necessary by either the Regional United States Forest Supervisor or the cooperating state forestry department or commission, shall be consistent with the terms of reference (n).

#### 5. Outdoor Recreation

a. Recreation Opportunities. Installations shall provide the public

access to natural resources, provided such access is consistent with natural resources and military readiness preservation.

b. Off-Road Vehicles. Recreational off-road vehicle use on installations shall be permitted only on trails and other areas designated by installation commanders. Installations shall monitor unimproved roads to detect off-road vehicle impacts and, thereby, protect sensitive natural, cultural, and geophysical resources.

## 6. Environmental Restoration

a. Natural Resources Trustees. The CERCLA "natural resources" definition includes "land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources...." Reference (o) designates the President as the trustee for Federally-protected or managed natural resources. Reference (p) designates the President's natural resources trustee responsibilities on DOD lands to the DOD. Accordingly, the Marine Corps serves as the natural resources trustee for its natural resources.

b. Natural Resources Trustee Responsibilities. After receiving notice of, or discovering, a natural resources injury, loss, or threat, a natural resources trustee shall take actions to recover for such damages. These actions include conducting a preliminary survey of areas affected by a discharge or release to determine if natural resources are or may be affected; cooperating with the OSC/Regional Project Manager in coordinating assessments, investigations, and planning; and carrying out a plan for restoration, rehabilitation, replacement, or acquisition of equivalent natural resources. The Marine Corps may take these actions when acting as a natural resources trustee.

c. Ecological Risk Assessments. The Marine Corps performs ecological risk assessments during the RI/FS phase of each CERCLA remedial action. Reviewing these assessments requires natural resource expertise, and installation natural resources personnel should, to the greatest extent practicable, review ecological risk assessments for their installation.

11105. DEFINITIONS. The majority of definitions provided below can be applied to all Marine Corps installations; however, for overseas installations, definitions provided in the appropriate FGS will supersede definitions provided here should they differ.

1. Adaptive Management. Adaptive management is an approach to treat all management decisions as experiments to be tested. Rather than immediately prescribe a management decision, the manager working in an adaptive fashion tests possible solutions to problems using a scientific method, complete with variable controls and measures of success. This approach welcomes new ideas, new data, and revision of plans when better approaches are possible.

2. Agricultural Outleasing. The use of DOD lands under a lease to an agency, organization, or person for the purpose of growing crops or grazing domesticated animals.

3. Annual Operational Plan. An INRMP management section addendum prepared annually to describe current fiscal year land management projects and their cost.
4. Biodiversity. The diversity of life and its processes: living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.
5. Biological Assessment. As defined by section 402.02 of reference (q). Within reference (q) are the minimum requirements for inclusion in a biological assessment for ESA regulatory consultation.
6. Candidate Species. Any species being considered under reference (i) by the Secretary of the Interior or Commerce for listing as an endangered or threatened species, but not yet the subject of a proposed rule.
7. Coastal Zone. As defined by section 1453(l) of reference (b).
8. Conservation. (When generally used in this chapter apart from the discussion per reference (i)), the planned management, use, and protection of natural resources to provide their sustained use and continued benefit to present and future generations.
9. Conservation Law Enforcement Officer. A person, having satisfied the minimum conservation officer training requirements and other position prerequisites of reference (r), serving in an installation position with primary responsibility for enforcing conservation and natural and cultural resources protection laws.
10. Critical Habitat. As defined in section 1532 (5)(A) of reference (i) and section 402.02 of reference (q).
11. Damages. As defined in section 11.14(l) of reference (s).
12. Ecological Risk Assessment. An investigation into the actual or potential impacts of contaminants from a HW site on plants and animals other than humans or domesticated species.
13. Ecosystem. A dynamic, natural complex of living organisms interacting with each other and with their associated nonliving environment.
14. Ecosystem Management. A goal-driven approach to managing natural and cultural resources that supports present and future mission requirements; preserves ecosystem integrity; is at a scale compatible with natural processes; is cognizant of natural processes' time scales; recognizes social and economic viability within functioning ecosystems; is adaptable to complex, changing requirements; and is realized through effective partnerships among private, local, state, tribal, and Federal interests. Ecosystem management is a process that considers the environment as a complex system functioning as a whole, not as a collection of parts, and recognizes that people and their social and economic needs are a part of the whole.

15. Endangered or Threatened Species. As respectively defined in sections 1532(6) and (20) of reference (i).

16. Exotic Species. As defined in reference (t), all species of plants and animals not naturally occurring, either presently or historically, in any ecosystem of the United States.

17. Fish and Wildlife Management. A coordinated program of actions for conserving, enhancing, and regulating indigenous wildlife and its habitats, including conserving protected species and non-game species, managing and harvesting game species, reducing bird aircraft strike hazards, and controlling animal damage.

18. Forest Management. A coordinated program of actions for ensuring that the health, vigor, and diversity of forest ecosystems are maintained while providing a diverse, quality military training environment and sustaining the production of forest products. Major forest management actions include forest administration, timber management, timber inventory, reforestation, timber stand improvement, timber access road construction and maintenance, IPM, and fire management.

19. Forest Products. All plant materials in wooded areas that have commercial value.

20. Game Species. Fish and wildlife that may be harvested in accordance with applicable Federal, state, and local laws.

21. Grounds. All land areas not occupied by buildings, structures, pavements, and other facilities. Grounds may be classified as improved (those near buildings), semi-improved (those near runways and roads), or unimproved.

22. Habitat. An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies their life requirements per reference (u).

23. Injury. As defined in section 11.14(v) of reference (s).

24. Invasive species. As defined in reference (v), an alien species whose introduction does, or is likely to cause, economic or environmental harm or harm to human health.

25. INRMP. A planning document using ecosystem management principles directing the management and conservation of installation natural resources.

26. Land Management. Programs and techniques to manage lands, wetlands, and water quality, including soil conservation, erosion control, nonpoint source pollution, surface and subsurface waters, habitat restoration, control of noxious weeds and poisonous plants, agricultural outleasing, grassland/rangeland management, identification and protection of wetlands, watershed protection, floodplains management, landscaping, and grounds maintenance.

27. Natural Resources. As defined in section 11.14(z) of reference (s).
28. Natural Resources Trustee. Federal trustees are those agencies which have statutory responsibility to protect or manage natural resources or stewardship responsibility as a manager of Federally-owned land. State agencies and Native American tribes also may be trustees.
29. Nongame Species. Species not harvested for recreation or subsistence purposes. As defined in reference (u).
30. Nonpoint Source Pollution. Any source of water pollution that does not meet the CWA definition of point source. Nonpoint source pollution is normally associated with diffuse runoff from rainfall or snowmelt.
31. Noxious Weeds. As defined in section 7702 of reference (w).
32. Off-Road Vehicle. As defined in reference (x), any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (C) any vehicle whose use is expressly authorized by the Marine Corps under a permit, lease, license, or contract.
33. Outdoor Recreation. Program, activity, or opportunity dependent on the natural environment. Examples are picnicking, bird watching, off-road vehicle use, hiking, wildlife and scenic river use, and primitive camping. Developed or constructed facilities such as golf courses, tennis courts, riding stables, lodging facilities, boat launching ramps, and marinas are not included as defined in reference (u).
34. Species At Risk. Includes species on lists maintained by USFWS, NOAA Fisheries, and state agencies as threatened or endangered, IUCN Red List, or are candidates for such lists. SAR also includes species that could be added to any such list due to current status, and whose conservation, if not addressed, would severely impact the military mission.
35. Stewardship. The responsibility to inventory, manage, conserve, protect, and enhance natural resources entrusted to one's care in a way that respects the intrinsic value of those resources, and the needs of present and future generations.
36. Waters of the United States. As defined in references (y) and (z).
37. Watershed. An area where rain, snow, sediment, and dissolved material drains to a river, lake, wetland, or other common point body of water.
38. Wetlands. As defined in references (y) and (z).

CHAPTER 11

NATURAL RESOURCES MANAGEMENT

SECTION 2: MARINE CORPS POLICY

11200. GENERAL. The guidance in subsections 4a {3-5}, 4b, 4e, 4f, 4g, 4h, 4i, 5, 6, and 9 does not apply to overseas installations. Guidance in subsections 4f and 4g can be applied, as appropriate, as BMPs.

1. Stewardship. Natural resources under Marine Corps stewardship and control shall be managed to support military readiness and be conserved, preserved, protected, rehabilitated, and enhanced. Land use practices and decisions shall be interdisciplinary and maintain military readiness, rely on scientifically sound conservation procedures and techniques, and employ scientific methods.

a. Procedures. Natural resources stewardship is an important and identifiable responsibility of command to maintain use of Marine Corps lands for mission requirements. Each installation shall establish procedures to ensure commanders on the installation are aware of:

(1) The condition of natural resources available to them.

(2) Any installation INRMP objectives and requirements applicable to them.

(3) Any foreseeable or actual conflicts between their proposed actions and any installation INRMP objectives and requirements.

b. Management. Each installation shall possess a natural resources program manager with responsibilities including making the installation commander aware of the condition of installation natural resources, the INRMP's objectives, and the potential or actual conflicts between natural resources management and maintaining military readiness and the capability of installation lands to support the installation's mission. Natural resources management shall encourage installation natural resources staff to participate in natural resources training and seminars.

c. Proposed Actions. The Marine Corps acts responsibly and in the public interest to restore, improve, preserve, and properly use installation natural resources to provide a landscape suitable for military mission accomplishment. Marine Corps plans, actions, and programs shall consider installation natural resources stewardship. Each action sponsor of a proposed new or continuing action affecting installation natural resources shall coordinate the proposal with installation natural resources managers. Each action sponsor shall, to the extent practicable, implement the natural resources manager's recommendations for minimizing adverse impacts to installation natural resources.

d. Outsourcing. Managing (including planning, implementation, and enforcement functions) and conserving Marine Corps natural resources are inherently governmental functions that shall not be outsourced by the Marine

Corps under the DOD Commercial Activities Program or an installation operating services contracts.

e. Non-Installation Natural Resources. The Marine Corps shall apply stewardship to non-installation natural resources, including marine mammals, coral reefs, land, and water potentially affected by Marine Corps military training and testing.

2. Ecosystem Management. The Marine Corps shall incorporate ecosystem management in installation land use planning and land management. Installation ecosystem management shall use adaptive management techniques.

3. Natural Resources Management. Each Marine Corps installation shall:

a. Preserve access to air, land, and seaspaces to meet military readiness requirements;

b. Comply with applicable natural resources protection requirements (e.g., laws, E.O.s, FGS and regulations);

c. Provide public access to installation lands, where practicable, provided such access does not conflict with military readiness and does not harm sensitive installation natural resources; and

d. Participate in regional ecosystem management partnerships provided such participation does not conflict with military readiness or provisions of a SOFA and does not harm installation natural resources.

e. Participate in wetland mitigation banks and threatened and endangered species conservation banks.

4. INRMP Preparation

a. General

(1) Each INRMP shall assist the installation commander to conserve, preserve, protect, rehabilitate, and enhance installation natural resources while maintaining military readiness and the capability of installation lands to support the installation's mission. Installation INRMPs, including revisions, shall be prepared in cooperation with FWS and the appropriate fish and wildlife agency for the state in which the installation is located, or with the appropriate host nation officials for overseas installations.

(2) An installation shall prepare an INRMP when it supports areas used for military readiness purposes that require integrated management of endangered or threatened species and/or critical habitat, other wildlife and habitat, substantial wetland areas, or other significant natural resources.

(3) The entire INRMP - not just those portions of the INRMP that specifically address fish and wildlife management - shall be prepared in cooperation with FWS and the appropriate state fish and wildlife agency. This cooperation as "parties" begins at the INRMP's developmental stage and

extends through its preparation, revision, and completion. Cooperation informs FWS and the state fish and wildlife agency of the installation's mission, invites them to consider solutions to natural resources management challenges, and expedites final INRMP coordination. Though not required per reference (aa), each installation should prepare its INRMP also in coordination with NOAA Fisheries when it supports trust resources under NOAA Fisheries jurisdiction.

(4) The final INRMP shall reflect the parties' agreement concerning conservation, protection, and management of fish and wildlife resources. While agreement is the goal of the entire plan, agreement among the parties is only required for those elements of the plan where the installation is subject to the legal authority (i.e., authority derived from a source other than reference (aa), such as reference (i)) of FWS and state fish and wildlife agency to conserve, protect, and manage fish and wildlife resources.

(5) The final INRMP shall not enlarge or diminish the existing responsibility and authority of FWS or a state fish and wildlife agency concerning installation natural resources management. Although not anticipated, where FWS or a state fish and wildlife agency withholds their agreement with an INRMP based on objections to elements of the INRMP clearly not within the agency's authority, an installation may, notwithstanding the objections, finalize its INRMP and proceed to manage its natural resources in accordance with its terms.

b. Cooperation

(1) At least 30 days before preparing or revising its INRMP, each installation shall provide all internal and external stakeholders written (e.g., letter, email) notice of its intent to begin the action. External stakeholders include FWS, the state fish and wildlife agency, and organizations and individuals holding installation real property interests. When providing this notice to FWS and the state fish and wildlife agency, the installation shall request FWS and the state fish and wildlife agency to cooperate in the INRMP's preparation, revision, and completion. The installation shall also request that FWS and the state fish and wildlife agency identify their desired number of draft and final documents and the preferred form (e.g., electronic file, hard copy) of receiving them.

(2) The FWS office for initial installation contact is the local FWS field office (attn: Sikes Act Coordinator) because a field office must review the draft INRMP and provide preliminary agreement concerning the INRMP's conservation, protection, and management of fish and wildlife resources provisions before it may be reviewed in the FWS regional office and the FWS Regional Director takes final action on it. An installation may contact its FWS regional coordinator for help in contacting a FWS field office.

(3) At least 60 days before providing a draft INRMP for review, each installation shall provide FWS and the state fish and wildlife office written notice of its intent to take the action. When providing FWS and the state fish and wildlife office a draft INRMP for review, each installation shall identify the review period in writing and request written acknowledgement of

the draft's receipt within 15 days after its receipt.

(4) The FWS field office and the state fish and wildlife office should provide written comments to the installation within the requested review period and send copies of their comments to the Sikes Act Coordinator at the FWS regional office and the state fish and wildlife agency director's office.

(5) Each installation shall provide the public a meaningful opportunity to review and comment on the INRMP draft. Installations should afford this opportunity that, absent extraordinary circumstances, shall be a minimum of 30 days of public review and comment during the NEPA analysis of INRMP preparation or revision.

(6) Each installation shall consider all comments received and send the FWS regional office (exception: The Manager of the California/Nevada Operations office will coordinate on INRMPs for installations in California and Nevada) and the state fish and wildlife agency director's office a draft final INRMP for approval with a writing documenting the actions taken on all comments to previous INRMP drafts. Each installation shall request written acknowledgement of the draft final INRMP's and the written response to comments' receipt within 15 days after their receipt. Each installation shall also give the FWS field office a copy of the written response to comments.

(7) When forwarding the draft final INRMP for review and approval, each installation shall request the FWS regional office and the state fish and wildlife agency director's office to act on the draft final INRMP within 60 days after their agencies' receipt, unless the parties agree on a longer period. The FWS Regional Director's and the state fish and wildlife agency director's written concurrence constitutes the parties' agreement concerning the INRMP's conservation, protection, and management of fish and wildlife resources. The installation commander's signature on the final INRMP completes the INRMP approval process. However, the installation commander shall not sign the INRMP until the INRMP's NEPA analysis is complete.

(8) When INRMP development requires ESA Section 7 consultation, or when the installation requests its INRMP serve in lieu of designating critical habitat for an endangered or threatened species, the cooperation timeline discussed above may be modified for FWS, and FWS may comment apart from its INRMP review. When this occurs, the installation shall request, in writing, the FWS regional and field offices notify the installation of the appropriate review timeline within 15 days after their receipt of the draft INRMP.

(9) Unless otherwise agreed, if the FWS regional office and the state fish and wildlife agency director's office fail to act on the draft final INRMP within 60 days after their agencies' receipt, the installation shall request HQMC assistance in facilitating review.

c. Internal Coordination

(1) The installation INRMP shall be prepared or revised with the assistance of an installation multi-disciplinary team, including natural

resources professionals, tenant military organizations, the installation comptroller, the facility planner, and counsel. This multi-disciplinary team shall ensure each INRMP is prepared or revised considering installation planning documents, including master plans, range plans, training plans, ICRMPs, pest management plans, bird-aircraft strike hazard reduction plans, and IR plans.

(2) The installation INRMP shall briefly summarize the interrelationships with installation planning documents. It shall also identify where the documents may be obtained for additional information.

(3) If INRMP preparation or revision exceeds the installation's internal capability, the installation may request the cognizant NAVFAC EFD/EFA or the USACE district to prepare the INRMP. The installation may also contract its INRMP preparation with other Federal or state agencies or private contractors, provided the installation INRMP preparation or revision continues with the assistance of an installation multi-disciplinary team.

d. Process. Installation INRMP preparation or revision shall use adaptive management techniques. An adaptive management approach to INRMP preparation or revision includes the following iterative steps:

- (1) Identify stakeholders.
- (2) Identify military readiness mission and other land use requirements.
- (3) Identify installation management requirements.
- (4) Identify natural resources management objectives.
- (5) Develop and evaluate natural resources management courses of action (with stakeholder participation).
- (6) Select and implement the selected natural resources management course of action.
- (7) Monitor and assess results.
- (8) The installation INRMP should be reviewed annually and updated as necessary in order to keep the plan current and relevant as well as alleviate the need for extensive and costly periodic revisions.

e. Consultation with Native American Tribes and NHOs

(1) Each installation shall consult with Federally Recognized Native American Tribes or NHOs with interests that may be affected by INRMP preparation or revision. These interests vary. For example, the INRMP may affect traditional subsistence and medicinal resources and the character of sacred and religious sites. Indian tribes may have interests in timber thinning, prescribed burning, recreational access to lands, and agricultural practices. A treaty may also affect INRMP development, such as when a tribe or organization has guaranteed access to fish, game, and other natural

resources on or adjacent to the installation.

(2) Procedures for consulting with Federally Recognized Native American Tribes and NHOs are found in chapter 8. During consultation, an Indian tribe may raise any number of matters, such as identifying installation areas and resources important to the tribe, providing advice on conservation needs and priorities, and sharing their specialized knowledge of installation natural resources. Consultation may require the installation INRMP to preserve these groups interests, such as managing culturally important game and plant species (e.g., restricting herbicide use in gathering areas).

f. INRMPs and Critical Habitat Designation

(1) Reference (i) permits Marine Corps lands to be excluded from critical habitat designation when such lands are managed in accordance with an approved INRMP that provides a benefit to the endangered or threatened species. Accordingly, each installation possessing endangered or threatened species, candidate species, or unoccupied habitat where critical habitat may be designated, shall evaluate within the INRMP the benefits of managing the species and/or habitat. This evaluation shall be clearly identifiable in the INRMP and should be identified in the INRMP's Table of Contents.

(2) Each installation evaluating the benefits of managing the species and/or habitat shall use the following FWS criteria to determine whether an INRMP provides a benefit to the endangered or threatened species:

(a) The INRMP provides a conservation benefit to the species. The cumulative benefits of the management activities identified in the INRMP, for the length of the plan, must maintain or provide for an increase in a species' population, or the enhancement or restoration of its habitat within the area covered by the INRMP (i.e., those areas deemed essential to the conservation of the species). A conservation benefit may result from reducing fragmentation of habitat, maintaining or increasing populations, ensuring against catastrophic events, enhancing and restoring habitats, buffering protected areas, or testing and implementing new conservation strategies.

(b) The INRMP provides certainty that it will be implemented. Persons charged with INRMP implementation are capable of accomplishing its objectives and have adequate funding for it. They have the authority to implement the INRMP and have obtained all the necessary authorizations or approvals. An implementation schedule (including completion dates) for the conservation effort is provided in the INRMP.

(c) The INRMP provides certainty that the conservation effort will be effective. The following INRMP components will be evaluated when determining the conservation effort's effectiveness:

1. Biological goals (i.e., broad guiding principles for the program) and objectives (i.e., measurable targets for achieving the goals).

2. Quantifiable, scientifically valid parameters for

demonstrating achievement of objectives, and standards for these parameters by which progress will be measured.

3. Provisions for monitoring and, where appropriate, adaptive management.

4. Provisions for reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness (based on evaluation of quantifiable parameters) of the conservation effort.

5. A duration sufficient to implement the plan and achieve the benefits of its goals and objectives.

g. Annual Reporting

(1) Before 1 January of the current calendar year, each installation shall annually send FWS and the state fish and wildlife agency a written report of INRMP implementation actions taken during the preceding fiscal year. When making this report, each installation shall request comments from FWS and the state fish and wildlife agency about INRMP implementation effectiveness and whether they believe the INRMP is being fully implemented. Each installation with an INRMP is also required to use the DON Natural Resources Metrics Builder as the tool for accomplishing the required INRMP annual review. The Metrics Builder is a web-based tool that includes seven-focus areas. Key focus areas are INRMP implementation, partnership effectiveness, INRMP team adequacy, impact on the mission, status of Federally-listed species and habitat, ecosystem integrity, and fish and wildlife management and public use. The objectives of the key focus areas are as follows:

(a) Assessment of INRMP Implementation. Determine if INRMP projects are properly developed and entered into the system for resourcing, document funding received, projects accomplished, and whether they meet expectations.

(b) Assessment of Listed Species and Critical Habitat. Determine if conservation efforts are effective and if the INRMP provides the conservation benefits necessary to preclude designation of critical habitat.

(c) Assessment of Partnership Effectiveness. Determine if the partnership between the INRMP team is cooperative and resulting in the effective implementation of the INRMP.

(d) Assessment of Fish and Wildlife Management and Public Use. Rate the availability of public recreational opportunities such as fishing and hunting, given the existing security requirements for the installation.

(e) Assessment of Team Adequacy for Natural Resources Management. Determine if the Natural Resources Team is adequately supported and appropriately trained to implement INRMPs.

(f) Assessment of Ecosystem Integrity. Determine the integrity of the various installation habitats through the development of a simple

protocol, using "indicator species" or possibly just the review team's subjective reasoning and consensus.

(g) Assessment of INRMP Impact on the Installation Mission.

Measure the level to which existing natural resources compliance requirements and associated actions support the installation's ability to sustain the current operational mission.

(2) Before 15 December of the current calendar year, each installation shall annually, for a reporting period covering the preceding fiscal year, provide CMC (LF) the following information for subsequent use in reporting progress towards meeting environmental goals:

(a) The installation name and applicable state(s).

(b) The fiscal year the most recent INRMP was completed, reviewed for operation and effect or revised.

(c) Whether and how the most recent INRMP was coordinated with appropriate operations and training (O&T) personnel and tenant military organizations.

(d) Whether projects were added to the most recent INRMP from O&T personnel and tenant military organization comments.

(e) Whether comments about INRMP implementation effectiveness were requested from O&T personnel and tenant military organizations.

(f) Whether comments about INRMP implementation effectiveness were received from O&T personnel and tenant military organizations.

(g) Whether FWS agreed to any of the most recent INRMP's elements concerning conservation, protection, and management of fish and wildlife resources.

(h) Whether projects were added to the most recent INRMP from FWS comments.

(i) Whether comments about INRMP implementation effectiveness were requested from FWS.

(j) Whether comments about INRMP implementation effectiveness were received from FWS.

(k) Whether the state fish and wildlife agency agreed to any of the most recent INRMP's elements concerning conservation, protection, and management of fish and wildlife resources.

(l) Whether projects were added to the most recent INRMP from state fish and wildlife agency comments.

(m) Whether comments about INRMP implementation effectiveness were requested from the state fish and wildlife agency.

(n) Whether comments about INRMP implementation effectiveness

were received from the state fish and wildlife agency.

(o) Whether the most recent INRMP contains a list of projects necessary to meet INRMP goals, objectives, and timeframes for implementing projects to conserve, preserve, protect, rehabilitate, and enhance installation natural resources.

(p) The following INRMP implementation FY funding matters:

1. Funding required for Class 0 and 1 projects.
2. Amounts funded for Class 0 and 1 projects.
3. Funding required for Class 0 and 1 projects.
4. Amounts funded for Class 2 and 3 projects.
5. Funding requested for Class 2 and 3 projects.
6. A list of unfunded Class 0 and 1 projects greater than \$50K.
7. An explanation of why each Class 0 and 1 project greater than \$50K is unfunded.

(q) Whether the installation received public comment on the draft of the most recent INRMP.

(r) Whether projects were added to the most recent INRMP from public comments.

h. Compliance with Other Environmental Requirements. INRMP development may affect natural resources other than endangered and threatened species (e.g., wetlands, cultural resources, surface water, and air) and may require other Federal, state, or local environmental compliance regulatory involvement. Each installation shall, as necessary, consult with environmental compliance regulators early in the INRMP preparation or revision process (e.g., submit the INRMP to the State Historic Preservation Officer during Section 106 consultation in compliance with reference (ab)). Environmental compliance consultation requirements (e.g., permitting or other approval) shall, to the extent practicable, be complete before INRMP completion. For overseas installations, the INRMP will reference appropriate compliance actions for cultural resources, surface water, air quality, etc. noted in the FGS.

i. Public Availability. The final installation INRMP is generally subject to public disclosure. Unclassified portions of final INRMPs shall be available electronically via the World Wide Web, CD-ROM, or other similar means. All INRMPs should undergo FOIA review, particularly for national security and sensitive information, before being disclosed to the public. For example, the specific locations of natural and cultural resources subject to pilfering or vandalism should not ordinarily be disclosed.

## 5. Coastal Zone Management

a. General. Marine Corps activities (e.g., operations, projects, and programs undertaken by or on behalf of the Marine Corps) that affect any land, water use, or natural resource of the coastal zone shall be carried out in a manner consistent, to the maximum extent practicable, with the enforceable policies of the coastal state's approved management program.

b. Wetlands Protection. Installations and units shall minimize the loss or degradation of coastal wetlands, enhance the natural value of wetlands, and protect water quality. Each installation shall support state development and implementation of any coastal nonpoint pollution control program affecting Marine Corps lands by identifying nonpoint sources, commenting on proposed management measures, and coordinating nonpoint source compliance efforts with the state.

6. Partnerships. Installations shall encourage the use of partnerships and volunteers, under the direction and approval of installation natural resources personnel, in connection with promoting natural resources management on the installation and facilities and programs for public outdoor recreation. Examples of effective partnership programs include Coastal America, Partners In Flight, Student Conservation Association, and the Chesapeake Bay Initiative. Each partnering or cooperating agreement in which installations formally participate must recognize that:

a. The primary Marine Corps national defense mission is to organize, train, and equip to provide FMFs of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. Marine Corps training on installations is vital to fulfilling this mission.

b. Actions specified in partnership or volunteer agreements shall not detract from Marine Corps national defense missions.

c. Installation lands shall not be used for mitigating off-installation, nonmilitary action impacts to the environment off the installation.

d. Installation lands shall not be set aside as permanent environmental preserves. The Marine Corps must maintain the flexibility to adapt its installation land use to respond to evolving United States' national defense strategy.

7. Exotic Species. Installations shall restrict the introduction of exotic species into any natural ecosystem, and exotic species shall not be deliberately introduced into any installation natural ecosystem unless the installation determines in accordance with NEPA or reference (ac) process that such an action would have no adverse impact. Exotic species control and removal measures, when determined to be practical and environmentally advantageous, shall be included in the installation INRMP.

#### 8. Natural Resources Program Funding

a. Budgeting. Installation commanders shall ensure natural resources management funding is included within their installation POM submittals.

Funds from other sources (e.g., agricultural outleasing, forestry, and hunting and fishing user fees) may also be available to supplement natural resources management program funding. Installations should not rely on other funding sources, however, because their availability fluctuates and is beyond DOD control.

b. INRMP Execution. The installation commander's signature on the final INRMP completes the INRMP and constitutes a commitment to seek funding and execute, subject to the availability of funding, all "must fund" projects and activities in accordance with the timeframes identified in the INRMP.

9. Natural Resources on Installations Identified for Closure. The disposition of natural resources on installations proposed for closure shall be considered in installation disposal and reuse NEPA analysis. Conservation easements may be granted on closing-installation real property with significant ecological, cultural, scenic, recreational, or educational value.

The Marine Corps shall, in accordance with installation closure and reuse requirements, consider transferring real property on closing installations to conservation agencies or other organizations.

11201. LAND MANAGEMENT. The guidance in subsections 3, 6, 7, and 8 does not apply to overseas installations; however, guidance in subsection 3 can be applied, as appropriate, as a BMP.

1. Land Management. As applicable, installation INRMPs shall address the conservation, preservation, protection, rehabilitation, and enhancement of ecosystems, soils, water resources, wetlands and watersheds, estuaries, soil and water conservation, biodiversity, semi-improved and unimproved grounds maintenance, nonpoint source pollution control, landscaping, agricultural uses and potential uses, fire management, insect and disease management, range/grassland conditions and trends, critical or unique coastal barrier systems, critical habitats, and other special interest areas and the impact on natural resources from maintaining military readiness and the capability of installation lands to support the installation's mission. Installation INRMPs and the installation master plan shall also identify the boundaries of endangered and threatened species habitat, wetlands, and other geographically specific areas (e.g., highly erodible soils) important to natural resources stewardship.

2. Use of Native Plants in Landscaping. Each installation shall use environmentally and economically beneficial landscaping practices. Each installation shall, to the extent practicable, use regionally-native plants for landscaping, soil conservation, water conservation projects, and other natural resources management projects. Guidance for implementing this policy is contained in references (ad) and sections 2(d) and 3(a) of reference (ae).

3. Wetlands. In order to comply with the national policy to permit no overall net loss of wetlands, installations and units shall, as applicable:

a. Avoid, to the maximum extent practicable, wetlands destruction or degradation. Any installation or unit proposed action that cannot be sited to avoid a wetland shall be designed to minimize wetland degradation and

shall include regulatory agency-required compensatory mitigation. Marine Corps land, lands of other entities, and wetland banks operated by governmental agencies or private organizations may be used for Marine Corps project compensatory mitigation when regulatory permits authorize such use.

b. Request the OASN (E,I&E) approve/disapprove all installation permanent wetlands resource area proposals. Any installation agreement to a deed restriction on government property for the purpose of maintaining wetlands in perpetuity, however, requires property disposal authority delegated from the General Services Administration. CMC (LF) shall approve/disapprove each non-Marine Corps entity request to mitigate a non-Marine Corps proposed project on Marine Corps land. This approval/disapproval is based on the installation's ability to maintain military readiness and support the installation's mission requirements, the nexus of the proposed project to the land at issue, and whether granting the request is in the best interests of the United States.

c. Evaluate impact of proposed actions significantly affecting wetlands pursuant to reference (af) (See chapter 12 of this Manual).

d. Map installation wetlands boundaries and distribute maps depicting them to facility planners, range control, installation tenants, and other potential users.

e. Maintain installation technical expertise for wetlands protection, management, identification, surveying, and mapping.

f. In all installation master plans, identify land suitable for preserving, creating, enhancing, and restoring wetlands. The Marine Corps encourages installation wetlands creation or enhancement projects and wetland banking, where compatible with maintaining military readiness and the capability of installation lands to support the installation's mission.

4. Nonpoint Source Pollution. Installations shall develop and implement nonpoint source pollution management programs emphasizing nonpoint source P2 from ground-disturbing actions (e.g., military training and natural resources management).

5. Soil Conservation. Installations shall incorporate soil and water conservation measures and landscaping with native vegetation, as appropriate, in the preliminary engineering, design, and construction of facilities involving ground disturbance. They shall also require erosion prevention and control measures in the specifications for all ground-disturbing construction projects. Erosion prevention and control measure costs shall also be specifically identified in new project investigations and preliminary engineering reports.

#### 6. Agricultural Outleasing

a. Outlease Agent. The NAVFACENGCOM is the Marine Corps agricultural outleasing agent, and installations may obtain agricultural outleasing assistance from the cognizant NAVFACENGCOM EFD/EFA. The EFD/EFA negotiate, execute, and administer real estate instruments, appraise land, and provide

cadastral support.

b. Money Rentals. The NAVFACENCOM shall deposit agricultural outlease money rentals in a special account in the Treasury to be used in accordance with reference (g) and as directed in references (ag) and (ah).

c. Outlease Plan. Each agricultural outlease shall contain an outlease plan. The outlease plan shall contain:

(1) As part of the outleasing contract, a soil and water conservation plan that:

(a) Establishes specific practices and/or projects and an implementation schedule to be performed by the leasee to protect and improve the productivity and fertility of the land.

(b) Requires restoration of the leasehold upon termination of the lease.

(2) Agricultural and pest management practices for maintaining compliance with state and Federal regulatory requirements and consistency with maintaining military readiness and the capability of installation lands to support the installation's mission.

d. Other Instruments. The installation CG/CO shall sign all outlease contracts, supplemental outlease agreements, and agricultural outlease plans.

e. NEPA Compliance. NEPA compliance shall be complete before the installation commander signs the outlease contract.

7. Agricultural Outlease Proceeds. Installation agricultural outleasing administrative expenses that may be funded with money rental proceeds are generally limited to supervisory, technical, clerical, legal, and accounting costs attributable to agricultural outleasing and financing of installation multiple land use management programs. These expenses, which include initiating new leases and administering existing leases, are prioritized in the following order:

a. Costs, including personnel-related costs, directly attributable to agricultural outlease management.

b. Costs of developing and implementing the INRMP and supporting natural resources management programs.

c. Costs of improving or rehabilitating agricultural outlease land and natural resources to enhance agricultural productivity.

d. Costs of improving or rehabilitating land and water resources for soil and water conservation.

e. Costs of improving land and water resources for enhancing fish and wildlife habitat.

f. Costs of improving land and water for outdoor natural resources recreational use.

g. Costs of travel and training supporting integrated natural resources management programs.

h. Procurement, maintenance, and repair costs for equipment and materials supporting integrated natural resources management programs and projects.

8. Agricultural Outleasing Fund Provisions. CMC (LF) provides installations with agricultural outlease funds to support natural resources management operations. These funds shall only be used for natural resources management operations and shall not be transferred to other accounts or used for any other purpose. Installation natural resources management expenditures shall be consistent with the INRMP. Natural resources management program expenses that may be funded with agricultural outlease money rental proceeds do not include:

a. Mitigation or compensation for damages to natural resources caused by construction projects or military activities.

b. Costs of the production of forest products (e.g., lumber).

c. Costs of recurring grounds maintenance on improved and semi-improved grounds (e.g., mowing, fertilizing, irrigating, seeding, pruning, ornamental planting, and pest control).

d. Archaeological/cultural resources survey costs and other cultural resources management costs unrelated to natural resources management.

e. Costs of animal damage control unrelated to natural resources management. However, costs of controlling or reducing bird and animal aircraft strike hazards are not excluded.

f. General environmental and facilities organizational support costs unrelated to natural resources management.

11202. FISH AND WILDLIFE MANAGEMENT. The guidance in subsections 1d and 2 does not apply to overseas installations.

1. Endangered and Threatened Species

a. General. The Marine Corps shall implement a fish and wildlife management program that complies with ESA or FGS consultation requirements. Installations shall, to the maximum extent practicable, avoid destruction or degradation of habitat of threatened and endangered species. Any installation or unit proposed action that cannot be sited to avoid habitat shall be designed to minimize habitat degradation and shall include regulatory agency-required compensatory mitigation. Marine Corps land, lands of other entities, and conservation banks operated by governmental agencies or private organizations may be used for Marine Corps project compensatory mitigation when regulatory authority approves such use.

b. Recovery. The Marine Corps shall enhance the recovery of endangered or threatened species and their habitats.

c. Candidate Species. Each installation shall inventory and monitor candidate species to evaluate and document any effects that military activities may have upon them. Installations should, to the maximum extent practicable, proactively manage candidate species populations to prevent impacts that could lead to listing of the species as threatened or endangered.

d. Species at Risk. Reference (i) does not protect other "Species at Risk", including but not limited to, state-listed species or IUCN Red List imperiled or threatened species. However, each installation should inventory and monitor them to the extent practicable because reference (af) may require an installation or unit consider a proposed action's impacts on state-listed species and state laws and regulations may govern their possession, propagation, sale, or taking on the installation.

## 2. Management

a. Cooperative Agreements. In addition to the use of partnerships and volunteers to promote natural resources management on the installation, installation CGs/COs may execute cooperative agreements with other state and local agencies to exchange information, conduct research, or study projects contributing to installation INRMP preparation and implementation.

### b. Natural Resources Law Enforcement

(1) Enforcing natural resources protection laws, including laws protecting outdoor recreational activities depending on natural resources, shall be an integral part of the installation natural resources management program. The installation environmental or natural resources manager shall direct natural resources law enforcement and installation conservation law enforcement officer conduct.

(2) Installations permitting hunting, fishing, and/or trapping shall issue regulations for harvesting fish and wildlife and develop procedures for enforcing applicable laws and regulations.

c. Hunting, Fishing, and Trapping Permit Fee Deposits. Each installation shall deposit hunting, fishing, and trapping permit fee proceeds into the Budget Clearing Account (Suspense) Navy 17X5095. The permit fee proceeds shall be delivered to the local disbursing officer for deposit, supported by an original and three copies of the Cash Collection Voucher (DD Form 1131) containing the following accounting data:

(1) Marine Corps 7X5095.27XX. (The last two digits of the subhead (i.e., XX) reflect the fiscal year).

(2) Unit Identification Code and the name of the generating installation.

(3) The stated purpose (e.g., "proceeds collected from the sale of

installation hunting and fishing access licenses").

(4) The collection date (must be the date payment is received).

(5) Note: Each installation is required to forward a copy of each DD Form 1131 to CMC (LF) at the end of each quarter.

d. Hunting, Fishing, and Trapping Permit Fee Use. Permit fee proceeds may be available to reimburse installation fish and wildlife enhancement program expenses. Each installation shall request authority from CMC (LF) to use these funds, and each request shall include:

(1) A financial summary of the installation's deposits to the Budget Clearing Account by prior fiscal year and current fiscal year.

(2) The unobligated balance of the installation's deposits to the Budget Clearing Account brought forward from the preceding fiscal year (actual).

(3) An estimate of fees to be collected and number of licenses to be sold during the remaining current and the next fiscal years. Actual licenses sold and fees collected is required at the end of each fiscal year.

e. Each installation commander shall implement a fish and wildlife management program and ensure the program expenses funded with permit fee proceeds do not exceed the amount of permit fee proceeds authorized by CMC (LF) to be available to the installation from the Budget Clearing Account. Each installation's fish and wildlife permit fee receipts and expenditures accounting shall comply with references (ai) and (aj).

f. Private Organizations

(1) Installation rod and gun clubs, conservation organizations established as part of the command recreation program, and other private organizations may volunteer services to promote installation natural resources management and facilities and programs for public outdoor recreation on the installation.

(2) Membership in a private organization shall not be a prerequisite to hunt, fish, or trap on an installation. Similarly, an installation's acceptance of a private organization volunteered services supporting installation natural resources management and facilities and programs for public outdoor recreation on the installation shall not require or be conditioned on excluding the public in any way from hunting, fishing, or trapping on the installation.

(3) Any private organization membership fee shall exclude the cost of obtaining an installation hunting, fishing, or trapping permit on the installation when the installation permit fee is based, in part, under the provisions of the installation's INRMP.

(4) Installations shall not solicit or accept private organization representation before regulatory authority.

(5) Private organization programs and projects on the installation shall comply with the installation INRMP and other Base orders and instructions.

11203. FOREST MANAGEMENT. The guidance in 11203 does not apply to overseas installations; however, guidance in subsection 1 can be applied, as appropriate, as a BMP.

1. Management. Each installation shall manage its forest in accordance with the installation INRMP.

2. Proceeds. Each installation shall identify its forest product sale proceeds with the applicable cost accounting code.

3. Forest Management Installations

a. Installations. The following installations may implement a Forest Management Program:

- (1) MCB Quantico, VA.
- (2) MCAS Cherry Point, NC.
- (3) MCB Camp Lejeune, NC.
- (4) MCAS Beaufort, SC.
- (5) MCRD Parris Island, SC.
- (6) MCLB Albany, GA.

b. Forest Product Funds. Each installation implementing a forest management program may sell timber and other forest products. Subject to the availability of funds, CMC (LF) shall reimburse installations for their costs for the production of forest products. These funds shall only be used for reimbursable forest product costs and shall not be transferred to other accounts or used for any other purpose. Installation forest product expenditures shall be consistent with the INRMP.

4. Forestry Expenditures. Installations shall plan and report reimbursable forest product costs using Cost Account Codes 3B10 through 3B70 in compliance with reference (ak) and reference (al). Reimbursable costs of expenditures shall be directly related to the economic production of forest products and may include:

- a. Timber stand improvement.
- b. Reforestation.
- c. Forest protection.
- d. Timber access road maintenance.

- e. Timber sale administration.
- f. Timber management.
- g. Equipment purchases.

5. Revenue Deposits. Installation forest product sale proceeds shall be deposited into the Budget Clearing Account (Suspense) Navy (17F3875). The forest product sale proceeds shall be delivered to the local disbursing officer for deposit, supported by an original and three copies of the Cash Collection Voucher (DD Form 1131) that must contain the following accounting data:

- a. Marine Corps 7F3875.27XX. (The last two digits of the subhead (i.e., XX) reflect the fiscal year.).
- b. Unit Identification Code and name of the generating installation.
- c. The stated purpose (e.g., "proceeds collected from the sale of forest products").
- d. The collection date (must be the date payment is received). Each installation selling forest products shall also forward a copy of the DD Form 1131 to the CMC (LF).

6. Reporting Requirements. The Forestry Program Report is required by the CMC (LF) for the installations listed above. The report shall be submitted to CMC(LF) no later than ten business days following the end of each quarter. Report Control Symbol DD-5090-05 is assigned to this reporting requirement.

11204. WILDLAND FIRE MANAGEMENT. The policies and standards adopted by reference in paragraph 11204.1 do not apply to overseas installations; however, guidance in the remaining paragraphs of 11204 can be applied, as appropriate, as BMPs.

1. Integrated Wildland Fire Management Policy. The Marine Corps adopts the following policies and standards by reference:

- a. Reference (am).
- b. Reference (an).
- c. Reference (ao).
- d. Reference (ap).
- e. Reference (aq).
- f. Reference (ar).

2. Applicability

- a. Installations with burnable acreage, or bordered by burnable acreage,

will develop and implement a Wildland Fire Management Plan (WFMP). The WFMP will be incorporated into or consistent with the INRMP and the Integrated Cultural Resources Plan.

b. Installations and/or facilities with minor wildfire hazard and/or prescribed burning activities may be exempted from WFMP requirements by CMC (LF). WFMP exemption requests should explain the outcome of the risk analysis conducted by the installation or command (e.g., under normal or worst case conditions, wildfires would rarely threaten people or facilities).

### 3. Program Authority

a. The installation commander or appropriate designee, defines the roles and responsibilities for wildland fire management on the installation, plans and programs resources, and will designate an installation Wildland Fire Program Manager in either the Fire and Emergency Services (F&ES) or Conservation/Natural Resources organization.

b. The installation commander, or appropriate designee, approves the installation WFMP.

c. The installation Wildland Fire Program Manager, in coordination with the installation Conservation/Natural Resources Manager and/or F&ES Fire Chief, is responsible for development of the WFMP. Additionally, the Wildland Fire Program Manager, in coordination with the installation Conservation/Natural Resources Manager and/or the F&ES Fire Chief, reviews and approves burn plans for prescribed fires consistent with the WFMP, the INRMP, and other applicable operating instructions.

d. The installation commander, or appropriate designee, approves the deployment of Marine Corps civilian firefighters to any off-installation incident. For F&ES firefighters, the installation commander may establish pre-deployment approval for responses covered by established mutual aid agreements.

4. Wildland Fire Organization Standards. Marine Corps organizations involved in wildland fire activities will incorporate NWCG and NIMS standards into their organizational structure when necessary to accommodate cooperation and integration with other Federal, state, and local wildland fire organizations across jurisdictional boundaries.

### 5. Training and Fitness Standards for Wildland Fire Management Personnel

#### a. Training Standards

(1) All civilian, contractor, and emergency services personnel involved in wildland fire management must be trained for their expected level of involvement in the wildland fire organization. Training shall meet the applicable NFPA or NWCG Standards for wildland fire activities. State training by the state in which the installation is located is also acceptable if appropriate for the personnel's expected level of involvement in wildland fire activities.

(2) Personnel in the fire protection and prevention GS-081 job series will meet the training standards specified in references (as) and (at), equivalent reference (au) training or equivalent state training requirements. Personnel who have learned skills from outside wildfire suppression, such as agency specific training programs or training and work in prescribed fire, structural fire, law enforcement, search and rescue, etc. may not be required to complete specific courses in order to qualify in a wildland fire position. However, position task books must be completed for documentation of the training.

(3) Personnel in the natural resources job series (GS-401 thru GS-499), archaeologist (GS-0193), and natural/cultural resources contractors with jobs requiring wildland fire suppression responsibilities must meet either the certifications as per references (as) and (at) or the equivalent reference (av) certifications.

(4) Personnel mobilized to participate in wildland fire management activities on Federal properties not under DOD jurisdiction, through the National Inter-Agency Fire Center (NIFC) and the Joint Director of Military Support (JDOMS) requests (see paragraph 12), must be certified for the expected level of involvement under NWCG standards. GS-081 job series and DOD contractor personnel that seek wildland fire certifications other than the NFPA Job Levels listed in Table 11.1 must comply with the appropriate NWCG criteria.

(5) Position descriptions for new hires that will participate in wildland fire activities will reflect the expected level of involvement and required training. Position descriptions for natural/cultural resources personnel with wildland fire management duties must state if the position qualifies the position holder as a primary or secondary wildland firefighter, as described in reference (aw). Natural resources personnel not classified as a primary or secondary wildland firefighter may perform collateral duties in wildland fire management activities as qualified.

(6) Personnel holding positions as primary and secondary wildland firefighters will be certified, as a minimum requirement, in Cardio-Pulmonary Resuscitation and Standard First Aid by the American Red Cross or comparable certification authority.

(7) HQ Air Force Civil Engineering Support Agency/Civil Engineering Fire Protection is the executive agent for the DOD F&ES Certification Program and will be responsible for issuing, maintaining, and tracking of NFPA wildland firefighter certifications for levels identified in Table 11-1. The installation Wildland Fire Program Manager is responsible for issuing, signing, and tracking of NWCG Qualification Card/ICS (also known as "red cards") for installation personnel. Installations are encouraged to partner with NWCG units to issue, maintain, and track qualifications and to conduct and receive training.

b. Physical Fitness Standards

(1) The installation WFMP will describe a measurable and objective medical examination or physical fitness test (step-test, pack test, etc.)

that will be used to establish fitness standards for personnel that participate in wildland fire management activities. All personnel involved in wildland fire activities must meet the medical examination or physical fitness test annually. NWCG publications, references (ax), (ay), (az), and (ba), provide guidance for establishing physical fitness standards for wildland fire management activities.

The WFMP will describe the procedures for notifying affected employees of the exam or test and how it relates to being qualified for their jobs, how employees are to be certified as fit to train for and take the physical fitness test, and the repercussions of failing the exam or test and procedures for re-examination or re-testing. All required exams and tests will be paid for by the government.

(2) Personnel whose job description requires participation in wildland fire management activities as a primary or secondary firefighter on Marine Corps installations will meet the pre-employment medical and physical examination criteria contained in reference (bb).

6. WFMP Components. The installation WFMP should be developed to reduce wildfire potential, protect and enhance valuable natural resources, integrate applicable state and local permit and reporting requirements, and implement ecosystem management goals and objectives on Marine Corps installations. The WFMP will directly support the Marine Corps mission and be consistent with installation emergency operations plans. As a minimum, the installation WFMP will include the following components:

a. Goals and Objectives. The WFMP shall establish goals and objectives for the wildland fire management program on the installation. The WFMP will identify all wildland fire management strategies including military training availability, ecosystem sustainability, and protection of F&ES personnel and the public.

b. Organizational Structure. The WFMP will describe the wildland fire management organizational structure and will indicate its position within the installation command structure. The organizational structure for wildland fire activities will be consistent with NWCG and NIMS ICS standards.

c. Wildland Fire Preparedness. The WFMP will include wildland fire preparedness, preplanned dispatch for both initial and extended attack, and prescribed fire and prevention per reference (bc). The minimum level of service for wildfire suppression shall consist of a direct wildland attack capability within 10 minutes of arrival of the initial wildland fire company at the fire scene.

d. Training Program. Include procedures to train all personnel involved in wildland fire management activities to the appropriate reference (bd) or reference (as) as described in Paragraph 6 of this policy.

e. Interagency Cooperation and Mutual Aid Agreements. Installations are encouraged to develop regional partnerships for wildland fire management support by means of reciprocal agreements with other Federal, state, local and private entities to share human, logistical, and operational resources.

Emergency assistance and mutual aid agreements will conform to the guidelines stated in references (h) and (be). Include IAGs and mutual assistance agreements in the WFMP as references or appendices.

f. Smoke Management and Air Quality. Describe the mission, environmental, human health and safety factors specific to the installation and region that affect smoke management and identify necessary mitigation practices. Refer to reference (bf) for guidance on factors to consider.

g. Safety and Emergency Operations. The WFMP must reflect that firefighter and public safety is the first priority in every wildland fire management activity. The WFMP will identify installation-specific safety and emergency operations protocols. The WFMP will require that all personnel involved in direct wildland fire management activities are outfitted with protective clothing and equipment that meets reference (bg).

h. Risk Assessment/Decision Analysis Processes. Sound operational risk management will be the foundation of the WFMP. Identify the indices and/or fire danger rating system that will be used to assess wildfire risk and potential fire behavior. The indices and/or fire danger rating system must adequately describe fire hazard, severity, intensity, and other significant factors affecting the protection of life and property. Identify the environmental factors that will be measured prior to ignition of a prescribed fire treatment. Identify normal and unique weather patterns that affect fire behavior on the installation.

i. Wildland Fire History. Include in the WFMP an analysis of both recent and long-term wildland fire history on the installation and in the region.

j. Natural and Cultural Resources Considerations Checklist. Provide a checklist in the WFMP that can be used to identify sensitive natural and cultural resources that should be given consideration before conducting any wildland fire management activity.

k. Mission Impact Considerations. Identify the potential impacts to the installation mission (positive and negative) that may occur as a result of implementation of the WFMP.

l. Wildland Fuel Factors. Identify the effects of installation fuel types and fuel loads on fire behavior. Display data on fuel types and fuel loading by maps or other means. Conduct fuel surveys to collect wildland fire fuels data if necessary.

m. Monitoring Requirements. Identify the environmental factors that will be monitored and the frequency of monitoring required for both a wildfire and prescribed fire. Identify post-fire assessment protocols for both wildfire and prescribed fires.

n. Public Relations. Identify a protocol for notifying the media and affected persons for wildfire incidents and prescribed burning activities.

o. Funding Requirements. Identify the funding requirements to train and equip wildland fire management personnel to ensure safe, effective, and cost-efficient operations in support of the WFMP. Identify the appropriate sources of funding for wildland fire activities.

(1) The costs associated with developing and drafting installation WFMPs or amending existing WFMPs in order to comply with this order will be funded by the O&M,MC account.

(2) Wildland fire management activities that are conducted for the purpose of compliance with environmental laws and regulations will be supported by conservation funds.

(3) Wildfire suppression, prescribed burning and other wildland fire management activities to support training, range use, munitions testing and evaluation, or other mission activity will be supported by the responsible activity through direct funding or reimbursement.

(4) Funding for wildfire prevention and fuels management for hazard reduction is an installation operations and maintenance responsibility.

(5) In accordance with reference (1), expenditures for the protection and maintenance of commercial forests can be reimbursed by proceeds derived from the sale of forest products; however, the total reimbursement for forest management obligations related to wildland fire management cannot exceed the forest management program proceeds in a given fiscal year on the installation.

p. Personnel Training and Certification Standards and Records. The WFMP will identify the staffing requirements, according to specific certification and training requirements, for the tasks associated with wildland fire management activities on the installation. Current training and qualification records will be maintained for all personnel involved in wildland fire management activities.

q. NEPA process for WFMP Implementation. Actions proposed in any WFMP may constitute a major Federal action as defined in section 18, paragraph (b)(2) of reference (bh). Major Federal actions must be evaluated for potential environmental effects. The NEPA document prepared for the installation INRMP may also include and provide analysis of the WFMP.

## 7. Prescribed Fires

a. Use of Prescribed Fire on Marine Corps Installations. Prescribed fire can be used as a management tool to attain the goals and objectives of the INRMP and to support other Marine Corps mission needs. Two types of prescribed fires are recognized: 1) those ignited by qualified personnel in accordance with an approved site-specific burn plan, and 2) wildfires managed under prescribed conditions as addressed in an approved WFMP.

b. Site-Specific Burn Plans. A site-specific burn plan will be developed for each prescribed burn conducted on Marine Corps property. The installation WFMP will identify the

required components for site-specific burn plans. At a minimum, burn plans will include the following:

- (1) Burn objectives.
- (2) Acceptable weather and fuel moisture parameters.
- (3) Required personnel and equipment resources.
- (4) Burn area map.
- (5) Smoke management plan.
- (6) Safety considerations.
- (7) Pre-burn authorization/notification checklist.
- (8) Coordination to consider mission, wildlife, endangered species, cultural resources, and noxious weed effects.
- (9) Alternative plan - to cover plan of action if wind or weather conditions change.
- (10) Plan for analysis of burn success and identification of lessons learned.

c. Use of Fire Breaks. When planning for prescribed fires, and when suppressing wildfire, utilize natural and existing man-made features whenever possible. Fire breaks, if required, must be constructed, maintained, or rehabilitated to prevent erosion.

8. Labor Relations. In the implementation of this policy guidance, activities shall ensure compliance with their statutory labor relations obligations.

9. Mutual Aid

a. Following proper coordination with the OSD through United States Northern Command (NORTHCOM) and JDOMS, military assistance (both military and civilian personnel) may be furnished to the NIFC in national fire emergencies pursuant to reference (bi) and subsequent modifications. Support for wildland fire incidents is reimbursable under reference (bj). Procedures for deployment of civilian personnel are provided in paragraph 11204.12.

b. Local area assistance included in existing agreements may be authorized by the installation commander. Immediate response requests will be handled per references (bk).

10. Reporting

a. Each installation will report to HQMC Natural Resources Manager, annually, by 31 December, the number of installation acres burned by wildfires and the number of acres prescribed burned for the just completed

fiscal year. All F&ES responses to wildland fire incidents shall be reported to the National Fire Incident Reporting System per reference (h).

b. Report all requests for civilian firefighter assistance or deployment per paragraph 11204.12.

11. Compliance. Compliance with this policy will be monitored and evaluated as part of the HQMC Benchmark ECE program in accordance with reference (bl).

12. Deployment And Reimbursement Procedures for Wildland Fire (not applicable outside the Continental U.S.)

a. DOD Civilian Firefighter Deployment

(1) Reference (bm) pre-approves the use of DOD civilian firefighters on wildfire incidents managed by other Federal agencies. Requests will be issued from regional or local Geographic Area Coordinating Centers to the specific civilian resources based on local mutual aid agreements. Notification procedures in paragraph 2 must be followed. Conditions for any deployment of civilian personnel include willingness of civilians to volunteer, approval by the installation commander, and coordination (through the chain of command) with JDOMS. Because of the rapid response necessary for deployment when requested by NIFC, permission should be obtained at the beginning of the fire season. The assignment must be accomplished by detail (i.e., temporary duty (TDY)).

(2) Notification Procedures. When a firefighter is deployed (and upon return), the installation wildland fire program manager, or acting, will report the deployment (or return) via e-mail to NORTHCOM and JDOMS with copy to the chain of command up to CMC (LF). The e-mail should include the name(s) of the firefighter(s), installation name, date of departure, name or location of wildfire (if known), and length of deployment (if known).

(3) Firefighter's Responsibilities. After obtaining the installation commander's permission, the civilian firefighter, through the installation wildland fire program manager, must ensure the following conditions are met.

(a) Passed current physical fitness requirement for NWCG position(s).

(b) Has current NWCG qualification card (red card).

(c) Has name and qualifications posted on the local wildland fire coordination center dispatch system.

(d) Has made arrangements for emergency TDY authorization.

(e) Ensured that the sponsoring Federal agency involved with the mutual aid agreement has issued or will issue a funds obligating document for reimbursement of expenses or has made other arrangements for reimbursement of expenses.

b. Fiscal and Entitlement Support. Support is fully reimbursable under

reference (bj). Volunteers will continue to be paid from their current payroll offices. All actual costs, including base salary, overtime, TDY travel, and per diem will be paid in accordance with paragraph 11204.12(b)(2). Employees selected for these assignments would be detailed to a set of duties and placed on TDY. The civilian firefighter will turn in all timesheets on return or, if possible, send to timekeeper weekly while deployed.

(1) Benefits and Entitlements. All current enrollments in Federal benefit coverage would continue (i.e., Federal Employees Health Benefits, Federal Employee Group Life Insurance, Thrift Savings Plan, Workers Compensation, etc.). Individuals with private insurance should check with their respective carriers to determine coverage. Firefighters identified for deployment should be advised to update their designation of beneficiaries, emergency contacts, and medical allergies statements. If required, components would submit a request for waiver of the biweekly maximum earnings limitation for approval.

(2) Reimbursement. Local resource managers should establish a local automatic reimbursable account. Actual costs related to the wildfire incident would be billed to this account. At the beginning of the fire season or prior to deployment, ensure that a funds-obligating document is received by the installation from the sponsoring Federal agency involved (such as the U.S. Department of Agriculture Forest Service, Bureau of Land Management, FWS, National Park Service, Bureau of Indian Affairs) or ensure that other reimbursement processes are in place. The funds obligating document (similar to a Military Interdepartmental Purchase Request) may be a Form AD-672 Reimbursement or Advance of Funds Agreement, BLM Form 1681-3, a Resource Order, or similar document. This document will contain financial information for reimbursement and billing procedures. Within thirty (30) calendar days after the month in which the deployment occurred, the employee will turn in all wildfire time records and all other expense records. The local resource manager will ensure that employee's time and travel voucher cover all expenses (e.g., night differential, hazard pay). The local resource manager will bill the Federal agency listed on the funds obligating document for reimbursement of all expenses.

11205. OUTDOOR RECREATION. The guidance in paragraph 11205 does not apply to overseas installations.

1. Outdoor Recreation Planning. Each installation may develop outdoor recreation policies and programs in consultation with the DOI and the appropriate state agency. Any installation recreation resource use selection procedures shall be impartial.

2. Recreational Off-Road Vehicles

a. Installation commanders shall give preference to existing trails when designating roads for off-road vehicle use.

b. When considering the suitability of areas and trails for off-road vehicle use, installation commanders shall consider the applicability of NEPA analysis and the foreseeable impacts of each type of off-road vehicle, taking

into account its seasonal use, range, and resulting impacts to installation natural resources, military readiness, and the capability of installation lands to support the installation's mission, and other recreation resources.

c. Any decision to open installation lands to off-road vehicle use shall apply equally to the public and military personnel. Each installation shall control off-road vehicle use to maintain public safety, security, military readiness, and natural resources. Therefore, any decision to open installation lands to off-road vehicle use shall include procedures for controlling the number and types of off-road vehicles, limiting their frequency and intensity of use, and limiting their range (i.e., restricting access to areas and trails authorized for off-road vehicle use).

d. Installations may deny installation access to persons violating off-road vehicle requirements.

e. If the installation commander or a designee determines that off-road vehicle use will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources, the installation will immediately prohibit such off-road vehicle use until the effects have been eliminated and measures have been implemented to prevent their recurrence.

11206. ENVIRONMENTAL RESTORATION. Each installation shall utilize installation natural resources professionals' expertise in contingency planning and in acting as a natural resources trustee. Each installation shall also coordinate with stakeholders when acting as a natural resources trustee.

CHAPTER 11

NATURAL RESOURCES MANAGEMENT

SECTION 3: RESPONSIBILITIES

11300. CMC (LF)/COMMANDER MCICOM

1. Ensure a Marine Corps-wide organizational capability and the programming necessary to establish and maintain installation integrated natural resources management programs.
2. Provide installations policy for establishing and maintaining INRMPS.
3. Coordinate Marine Corps natural resources management program issues with other Federal agencies, the military services, and private organizations.
4. Identify Marine Corps-wide program and project priorities, and distribute available funds to meet installation natural resources management requirements that cannot be locally funded.
5. Maintain reports and other records of installation natural resources business transactions (e.g., agricultural outlease proceeds; hunting, fishing, and trapping permit fee proceeds; forest product sales proceeds) and track natural resources management expenditures charged to applicable accounts.
6. Ensure, through field visits and the ECE Program, Marine Corps compliance with applicable Federal, state, FGS and local natural resource management requirements.
7. Assist installations in resolving any disputes with Federal, state, and local natural resource regulatory officials.

11301. CG OF MCI EAST, WEST, AND PACIFIC

1. Coordinate proposals for new and continuing actions that affect natural resources with the managers of those resources.
2. Take appropriate action to ensure that authorized, funded, or conducted actions comply with reference (af) and all related natural and cultural resources laws and E.O.s.

11302. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Ensure the installation implements the requirements and policies of this chapter.
2. Act as the installation natural resources trustee.

REFERENCES

- (a) 7 U.S.C. 136-136y
- (b) 16 U.S.C. 1451-1465
- (c) Office of the Undersecretary of Defense, Memorandum for Assistant Secretary of the Army (Installations, Logistics and Environment), Assistant Secretary of the Army (Installations and Environment), Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations and Environment), "Volunteer and Partnership Cost-Share Program," January 12, 1994
- (d) Federal Register, Volume 60, page 58605, November 28, 1995
- (e) Federal Register, Volume 65, page 66913, November 7, 2000
- (f) Federal Register, Volume 65, page 62565, October 18, 2000
- (g) 10 U.S.C. 2667
- (h) DOD Instruction 6055.06, "DOD Fire and Emergency Services (F&ES) Program," December 21, 2006
- (i) 16 U.S.C 1531-1544
- (j) 16 U.S.C. 703-712
- (k) Title 50, Code of Federal Regulations, Part 10, Section 13, "List of Migratory Birds," 2005 edition
- (l) 10 U.S.C. 2665
- (m) DOD Financial Management Regulation, Volume 11A, "Reimbursable Operations, Policy and Procedures, Chapter 16 - Accounting for Production and Sale of Forest Products," August 2002
- (n) Title 1533.31 of the Forest Service Manual - "Forest Insect and Disease Suppression Agreement," Washington Office (WO) Amendment 1500-91-9, effective June 13, 1991
- (o) 42 U.S.C. 9601-9675
- (p) Executive Order 12580, "Superfund Implementation," January 23, 1987
- (q) Title 50, Code of Federal Regulations, Part 402, "Interagency Cooperation - Endangered Species Act of 1973, As Amended," 2006 edition
- (r) MCO 5090.4A
- (s) Title 43, Code of Federal Regulations, Part 11, "Natural Resource Damage Assessments," 2006 edition

- (t) Executive Order 11987, "Exotic Organisms," May 24, 1977
- (u) Title 32, Code of Federal Regulations, Part 190, Section 3, "Definitions," 2005 edition
- (v) Executive Order 13112, "Invasive Species," February 3, 1999
- (w) 7 U.S.C. 7701-7772
- (x) Executive Order 11644, "Use of Off-Road Vehicles on the Public Lands," February 8, 1972
- (y) Title 33, Code of Federal Regulations, Part 328, Section 3, "Definitions," 2007 edition
- (z) Title 40, Code of Federal Regulations, Part 122, Section 2, "Definitions," 2007 edition
- (aa) 16 U.S.C. 670-670f
- (ab) 16 U.S.C. 470-470w-6
- (ac) 32 CFR 187
- (ad) Presidential Memorandum, "Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds," April 26, 1994
- (ae) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (af) 42 U.S.C. 4321-4347
- (ag) NAVFAC P-73, Chapter 19, "Real Estate Procedural Manual"
- (ah) NAVFAC P-73, Volume 2, "Natural Resources Management Procedural Manual"
- (ai) NAVCOMPT Manual, paragraph 032114
- (aj) MCO 7301.116
- (ak) DoD FMR
- (al) MCO P7300.21A
- (am) The Federal Wildland Fire Management Policy and Program Review of 1995 (as updated, Jan 01)
- (an) Interagency Strategy for the Implementation of the Federal Wildland Fire Management Policy, June 20, 2003
- (ao) The National Wildfire Coordinating Group (NWCG), National Interagency Incident Management System Wildland Fire Qualification System Guide (PMS 310-1/NFES 1414)

(ap) The National Fire Protection Association (NFPA) Standard 1051 - Standard for Wildland Firefighter Professional Qualifications, NFPA Standard 1143 - Standard for Wildland Fire Management, and NFPA Standard 1144 - Standard for Protection of Life and Property from Wildfire

(aq) DOD Instruction 6055.06, 21 Dec 06, DOD Fire and Emergency Services Program

(ar) Homeland Security Presidential Directive-5 (HSPD-5), National Incident Management System (NIMS)

(as) National Fire Protection Association 1051, "Standard for Wildland Fire Fighter Professional Qualifications," 2007 edition

(at) National Fire Protection Association 1002, "Standard for Fire Apparatus Driver/Operator Professional Qualifications," 2003 edition

(au) NWCG Driver/Operator Professional Qualification System Guide (PMS 310-1/NFES 1414)

(av) NWCG Wildland Fire Qualification System Guide (PMS 310-1/NFES 1414)

(aw) Office of Personnel Management, "CSRS and FERS Handbook for Personnel and Payroll Offices, Chapter 46 - Special Retirement Provisions for Law Enforcement Officers, Firefighters, Air Traffic Controllers, and Military Reserve Technicians," April 1998

(ax) National Wildfire Coordination Group, National Interagency Incident Management System, Wildland Fire Qualification System Guide, PMS 310-1/NFES 1414, April 2006

(ay) National Wildlife Coordination Group, National Fire Equipment System, "Fitness and Work Capacity: Second Edition," NFES 1596, PMS 304-2, 1997

(az) National Wildlife Coordination Group, National Fire Equipment System, "Fit to Work?" NFES 1595, PMS 304-1, 1985

(ba) National Wildlife Coordination Group, National Fire Equipment System, "Fit to Work, Fatigue and the Firefighter (video)," NFES 2071, PMS 306, 1989

(bb) DOD 6055.05M, "Occupational Medical Examinations and Surveillance Manual," May 2, 2007

(bc) National Fire Protection Association 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments," 2004 edition

(bd) NWCG PMS qualification documents (PMS 310)

(be) MCO P11000.11B

(bf) National Wildfire Coordination Group, National Fire Equipment System,

"Smoke Management Guide," NFES 1279, PMS 420-2, 2001

(bg) NFPA 1977 - Standard on Protective Clothing and Equipment for Wildland Fire Fighting

(bh) Title 40, Code of Federal Regulations, Parts 1500-1508, "Council on Environmental Quality NEPA-implementing Regulations," 2005 edition

(bi) Interagency Agreement for the Provision of Temporary Support During Wildland Firefighting Operations among the United States Department of the Interior, the United States Department of Agriculture and the United States Department of Defense, 2005

(bj) 31 U.S.C. 1535

(bk) DOD Directive 3025.1, "Military Support to Civil Authorities (MSCA)," January 15, 1993

(bl) MCO P5090.2A

(bm) DTG 281832Z APR 06 OPER/DOD SUPPORT OF CIVIL AUTHORITIES//MSGID/ORDER/CJSC STANDING EXORD.

Table 11-1.--Correlation of NFPA and NWCG Certification Levels and Corresponding NWCG Training Requirements for Attaining Each Level		
NFPA Job Title	NWCG Equivalent	NWCG Equivalent Training
Wildland Fire Fighter I	Firefighter II	<ul style="list-style-type: none"> <li>• S-130 Fire Fighter Training</li> <li>• S-190 Introduction to Fire Behavior</li> <li>• L-180 Human Factors on the Fireline</li> <li>• I-100 Introduction to the Incident Command System</li> <li>• RT-130 Annual Fireline Safety Refresher</li> </ul>
Wildland Fire Fighter II	Firefighter I	<ul style="list-style-type: none"> <li>• S-131 Advanced Fire Fighter Training</li> <li>• S-133 Look Up, Look Down, Look Around</li> <li>• S-201 Supervisory Concepts and Techniques</li> <li>• S-211 Portable Pumps and Water Use</li> <li>• S-212 Wildland Fire Chain Saws</li> <li>• S-216 Driving for the Fire Service</li> <li>• RT-130 Annual Fireline Safety Refresher</li> </ul>
Wildland Fire Officer I	Single Resource Boss or Incident Commander Type 4	<ul style="list-style-type: none"> <li>• S-200 Initial Attack Incident Commander</li> <li>• S-213 Tractor Use/Tractor Boss*</li> <li>• S-214 Tanker Use/Tanker Boss*</li> <li>• S-215 Fire Operations in the Urban Interface</li> <li>• S-230 Crew Boss (Single Resource)*</li> <li>• S-231 Engine Boss (Single Resource)*</li> <li>• S-234 Ignition Operations</li> <li>• S-260 Fire Business Management Principles</li> <li>• S-270 Basic Air Operations</li> <li>• S-290 Intermediate Wildland Fire Behavior</li> <li>• I-200 Basic Incident Command System</li> <li>• P-151 Wildfire origin and Cause Determination</li> <li>• RT-130 Annual Fireline Safety Refresher</li> </ul> <p><i>*Only one of these courses is required, depending upon the type of Single Resource Boss certification desired.</i></p>

Table 11-1.--Correlation of NFPA and NWCG Certification Levels and Corresponding NWCG Training Requirements for Attaining Each Level--Continued		
NFPA Job Title	NWCG Equivalent	NWCG Equivalent Training
Wildland Fire Officer II	Incident Commander Type 3	<ul style="list-style-type: none"> <li>• S-300 Incident Command Extended Attack</li> <li>• S-301 Leadership and Organizational Development</li> <li>• S-330 Task Force/Strike Team Leader</li> <li>• S-390 Introduction to Wildland Fire Behavior Calculations</li> <li>• I-300 Intermediate Incident Command System</li> <li>• RT-130 Annual Fireline Safety Refresher</li> </ul>

CHAPTER 12

ENVIRONMENTAL PLANNING AND REVIEW

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CHAPTER 12

ENVIRONMENTAL PLANNING AND REVIEW

SECTION 1: INTRODUCTION

12100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with references (a), (b), (c) and (d).

12101. APPLICABILITY

1. This chapter applies to all Marine Corps active and reserve installations, commands, detachments, and units located within the United States, its territories, and possessions.

2. Marine Corps active and reserve installations, commands, units, and detachments may also need to comply with state environmental planning procedures when joint activities with non-Federal parties are conducted.

3. Marine Corps actions in foreign countries are not subject to the requirements of reference (a). However, certain Marine Corps actions are subject to references (b) and (c) concerning environmental effects abroad of major DOD actions. Commanders of overseas installations must comply with these requirements, which are reprinted at reference (d) and within Appendix Q of this document. The requirements outlined in this chapter are specific to reference (a); while they do not explicitly apply to Marine Corps actions abroad, certain guidance provided in this chapter is identified as BMPs for compliance with the requirements of references (b), (c), and (d), as long as they do not conflict with references (b), (c), and (d).

12102. BACKGROUND. Reference (a) is the basic national charter for the protection of the environment. It establishes policies, sets goals, and provides means for carrying out environmental policy.

12103. FEDERAL STATUTES

1. NEPA of 1969 (42 U.S.C. 4321 et seq.)

a. Basic National Charter. Reference (a) establishes national policy and goals for protection of the environment. Reference (a) requires Federal decision makers to consider the environmental consequences of a proposed action before making the decision to take the action. For certain actions, reference (a) requires decision makers to open the decision making process to public scrutiny and involvement.

b. "Action-Forcing" Provisions. Section 102(2) of reference (a) contains "action-forcing" provisions to insure [sic] that Federal agencies act according to the letter and the spirit of reference (a). Section 102(2)(A) of reference (a) mandates that Federal agencies "utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts, in planning and in decision making that may have an impact on man's environment." Section 102(C) of reference (a) requires that Federal agencies

"include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impacts of the proposed action." Further, section 102(E) of reference (a) requires that Federal agencies "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

c. CEQ. Section 202 of reference (a) created the CEQ in the Executive Office of the President. CEQ promulgates regulations that implement section 102(2) of reference (a). CEQ's regulations (reference (e)) are binding on the Marine Corps. CEQ also provides guidance documents that aid Federal agencies in their implementation of the myriad of NEPA procedural requirements.

d. Four Basic Tenets. The four basic tenets of references (a) and (e) are:

(1) Procedures must be in place to ensure that environmental information is available to decision makers and citizens before decisions are made and before Federal actions are taken.

(2) The NEPA process should identify and assess reasonable alternatives to proposed actions that would avoid or minimize adverse environmental effects.

(3) The purpose of reference (a) is to help agency officials make decisions based on an understanding of environmental effects, enabling them to take actions that protect, restore, and enhance the environment.

(4) Agencies must integrate the NEPA process with other planning at the earliest possible time to ensure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.

2. Interaction with other Environmental Statutes, Regulations, and E.O.s. A number of environmental statutes, implementing regulations, and E.O.s that impose substantive and procedural requirements, may apply to a proposed action. The NEPA process facilitates the identification of applicable statutes, regulations, and E.O.s with which the Action Proponent must also comply. Completion of the NEPA process does not substitute for compliance with these other laws and statutes; however, certain procedural requirements included in the NEPA process may satisfy those of other statutes and streamline compliance. The following is a representative, but not inclusive, list of environmental legislation and E.O.s that may apply to a proposed action:

a. American Indian Religious Freedom Act (42 U.S.C. 1996 and 1996a).

b. Archaeological Resource Protection Act (ARPA) of 1979, as amended (16 U.S.C. 470aa-mm).

- c. Clean Air Act of 1970, as Amended (42 U.S.C. 7401 *et seq.*).
- d. Clean Water Act of 1977, as Amended (33 U.S.C. 1251 *et seq.*).
- e. Coastal Zone Management Act of 1972 (16 U.S.C. 1451 *et seq.*).
- f. Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*).
- g. Marine Mammal Protection Act of 1972, as Amended (16 U.S.C. 1361 *et seq.*).
- h. Marine Protection Research and Sanctuaries Act of 1972, as Amended (33 U.S.C. 1401 *et seq.* and 16 U.S.C. 1431 *et seq.*).
- i. Migratory Bird Treaty Act of 1918, as Amended (16 U.S.C. 703 *et seq.*).
- j. National Historic Preservation Act of 1966, (16 U.S.C. 470 *et seq.*).
- k. Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801 *et seq.*).
- l. Pollution Prevention Act of 1990 (42 U.S.C. 13101 *et seq.*).
- m. Safe Drinking Water Act of 1974 (42 U.S.C. 300(f) *et seq.*).
- n. Federal Aviation Act of 1958 (P.L. 85-726, 72 Stat. 731)
- o. E.O. 11988, Floodplain Management, 24 May 1977.
- p. E.O. 11990, Protection of Wetlands, 24 1977.
- q. E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 11 February 1994.
- r. E.O. 12962, Recreational Fisheries, 7 June 1995.
- s. E.O. 13007, Indian Sacred Sites, 24 May 1996.
- t. E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks, 21 April 1997.
- u. E.O. 13089, Coral Reef Protection, 11 June 1998.
- v. E.O. 13112, Invasive Species, 3 February 1999.
- w. E.O. 13158, Marine Protected Areas, 26 May 2000.
- x. E.O. 13175, Consultation and Coordination with Indian Tribal Governments, 6 November 2000.
- y. E.O. 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, 10 January 2001.

z. E.O. 13423, Environment, Energy and Transportation Management, 24 January 2007.

aa. E.O. 13514, Federal Leadership in Environmental, Energy and Economic Performance, 8 October 2009.

12104. POLICY

1. (CMC (LF) is the cognizant organization within the Marine Corps for affecting compliance with reference (a) and should be consulted regarding Marine Corps interpretation of the procedures contained in this chapter and references (e) and (f), as well as any procedural requirements related to NEPA analysis and decision making within the chain of command. Overseas installations should consult CMC (LF) regarding compliance with reference (b) and Marine Corps interpretation of the procedures contained in references (c) and (d).

2. The Marine Corps will, consistent with its mission and the environmental laws and regulations of the United States and applicable international treaties and agreements:

a. Prevent or reduce adverse impacts on the environment through effective environmental planning.

b. Consider environmental factors concurrently with mission effectiveness, cost, and other relevant factors.

c. Commence a systematic examination of the environmental implications of proposed actions at the earliest possible time.

d. Understand and comply with all environmental legal requirements, anticipate and control associated costs, and avoid delays caused by inadequate preparation and planning.

e. Provide environmental training commensurate with the responsibilities of the trainee and consistent with the mission of the DON through courses on environmental planning and by integrating instruction in environmental planning into other courses of training for military members and civilian employees.

f. Encourage effective and practical public participation in environmental planning.

g. Apply appropriate consideration of socioeconomic issues in environmental planning matters, including where the potential for disproportionately high and adverse impacts on minority and low-income populations exists.

h. Include appropriate provisions for environmental planning in instructions, orders, plans, or other guidance.

i. Include the costs of environmental planning in planning, programming, and budgeting for the proposed action. The Action Proponent

and/or Action Sponsor has the responsibility for programming these costs and including sufficient time in project schedules to allow for compliance with references (a) and (b).

j. Prepare, safeguard, review, and disseminate required planning, analysis, and environmental documents, if any, for classified actions in accordance with applicable security instructions and requirements.

k. Assign responsibility for preparation of action specific environmental analysis under reference (a) to the Action Proponent. The Action Proponent should understand the plans, analyses, and environmental documents related to that action.

3. Whenever possible, Action Proponents must include sustainable alternatives in the NEPA process. In particular, Action Proponents must consider life-cycle costs and the options available in employing P2 and energy efficient alternatives to minimize these costs when evaluating potential projects or actions.

4. Action Proponents must ensure that, consistent with other national policies and national security requirements, practical means and measures are used to protect, restore, and enhance the quality of the environment; to mitigate adverse consequences; and to attain the following objectives:

a. Attain the widest range of beneficial uses of environmental resources without degradation, risk to health or safety, and other consequences that are undesirable and unintended.

b. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choices.

c. Enhance the quality and conservation of renewable resources and work toward the maximum attainable recycling of depletable resources.

d. Achieve a balance between resource use and development within the sustained carrying capacity of the ecosystem involved.

e. Provide the opportunity for public comment and involvement.

5. The Installation/Command EIRB must include individuals with appropriate expertise to ensure that the document meets the requirements of reference (a), is consistent with the command's operational and master planning goals, and meets the policies and goals of the command in the military and civilian communities.

CHAPTER 12

ENVIRONMENTAL PLANNING AND REVIEW

SECTION 2: MARINE CORPS PROCEDURES

12200. GENERAL OBJECTIVES. To comply with the procedural requirements of references (a), (b), (c) and (d), the Marine Corps must attain the following objectives:

1. Ensure compliance by beginning analysis of the effects of an action at the earliest planning stage.
2. Assess environmental consequences of proposed actions that could affect the quality of the environment.
3. Use a systematic, interdisciplinary approach that ensures integrated use of the natural and social sciences and environmental considerations in planning and decision making when an adverse impact on the environment could occur.
4. Consider reasonable alternatives (including the "no-action" alternative) to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available natural resources.
5. Use ecological information when planning and developing resource-oriented projects.
6. Ensure that environmental planning analyses are based on information that is of "high quality" (per section 1(b) of reference (e)).
7. For actions conducted in the United States, its possessions and territories, set time limits appropriate to the proposed action, considering operational requirements, as well as necessary time for consultations required under references (g), (h) and (i) and public notice and comment periods required under section 10 of part 1506 of reference (e) as legally applied by the EPA.

12201. SPECIFIC REQUIREMENTS FOR NEPA

1. NEPA Process. The requirements of this chapter apply to proposed Federal actions that have potential to impact the human environment. Examples of such actions include, but are not limited to, actions that could result in a change to the physical environment, facilities construction, new management and operational concepts and programs, including personnel assignment; real property and facility management; implementation of plans such as Integrated Natural Resource Management Plans (INRMP) and ICRMP; actions involving chemical weapons/munitions; an action with adverse local or regional effects on energy or water availability; changes to existing airspace use that generate impacts on the environment or socioeconomic systems, or create a hazard to non-participants; leases, easements, permits, licenses, or other entitlement for use, and changes to established installation land use that generate impacts on the environment; operations and activities including

training, flight operations, or facility test and evaluation programs conducted inside and outside the boundaries of an existing military reservation where significant environmental damage may occur. Social and economic impacts alone are not sufficient to trigger reference (a).

2. Step-By-Step Methodology. Use the following methodology to determine whether requirements of this chapter apply and, if so, what level of NEPA documentation the Action Proponent should initiate.

a. Step 1. Action Proponents shall submit a completed Request for Environmental Impact Review (REIR) to the installation's environmental planning staff for all proposed actions that have potential to impact the human environment. The REIR shall be a form prescribed by the installation CG/CO, and should contain enough information to support the use of a CATEX (in case a CATEX applies). Installations are encouraged to use the example REIR in appendix M, or develop an REIR suitable to meet installation coordination and documentation requirements. This reporting requirement is exempt from reports control per reference (j), part IV, paragraph 7.k. The installation/Command CO/CG may delegate REIR signature authority to qualified environmental planning staff.

b. Step 2. Using the REIR (see also paragraph 12203.c), Installation Environmental Planning Staff determine whether the proposed action is exempt from NEPA documentation pursuant to paragraphs 12201.2(b)(1) through 12201.2(b)(1)(4) below. If the proposed action is exempt from further NEPA documentation, the requirements of this chapter do not apply and the exemption shall be documented on the REIR. Such a decision need not be presented to the Installation/Command EIRB. If the proposed action is not exempt, go to Step 3.

(1) The proposed action is a CERCLA cleanup action and documented pursuant to reference (g).

(2) The proposed action is one for which the Marine Corps has no decision making authority and no discretion in implementing the action, such as those carried out under a non-discretionary mandate from Congress (e.g., Congressional direction to transfer Federal property to a particular entity for a particular purpose that leaves DON no discretion in how the transfer will be implemented) or as an operation of law (e.g., reversionary interests in land recorded at the time the property was obtained and that provide no discretion in whether to trigger the reversion or how the reversion will be implemented).

(3) The proposed action is exempt from reference (a) by statute.

(4) Compliance with reference (a) would cause a clear and unavoidable conflict with another Federal law.

c. Step 3. Installation Environmental Planning Staff: Review the REIR and determine whether the proposed action is contained in DON's list of actions categorically excluded from further NEPA analysis (see 12201.3.a). If it is on the CATEX list, go to Step 4. If the action is NOT contained in the list of CATEXs, go to Step 5.

d. Step 4. Installation Environmental Planning Staff: Determine whether any of the Conditions Not Permitting the Use of a CATEX, also known as Extraordinary Circumstances, listed in paragraph 12201.3.b apply. If one of the enumerated conditions applies, document it on the REIR and go to Step 5. If none of the enumerated conditions apply, the proposed action is categorically excluded from the requirement of preparing an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). **An action may not be segmented in order to categorically exclude it from further analysis** (e.g., an action may only be considered exempt if the selected CATEX from paragraph 12201.3.a applies to all aspects of that action). The Installation Environmental Planning Staff shall prepare a Decision Memorandum that summarizes the proposed action, specifies the CATEX being used, and notes any BMPs or conservation measures required as part of the action. The Decision Memorandum is then forwarded to the installation CG/CO or the official to whom signature authority has been delegated. Note that even if a proposed action technically qualifies for a CATEX, the Action Proponent may be required to prepare an EA when extraordinary circumstances exist (see list in 12201.3.b). As a BMP, for actions that are completed on a routine basis over the course of a year, a single REIR form and CATEX Decision Memorandum summarizing all planned instances of that action may be prepared.

e. Step 5. Installation Environmental Planning Staff: Determine whether the proposed action requires an EA under paragraph 12201.4 or an EIS under paragraph 12201.5. If so, prepare a Decision Memorandum noting the rationale for the decision to complete an EA or an EIS. Forward the Decision Memorandum to the installation CO/CG or the official to whom signature authority has been delegated. Notify the Action Proponent of the requirement to prepare an EA or EIS, as appropriate.

f. Step 6. Action Proponent: Proceed with preparation of an EA or EIS (using the assistance of the Installation Environmental Planning Staff).

3. CATEX (section 4, part 1508 of reference (e))

a. List of CATEXs (section 6(f) of reference (f)). Pursuant to references (e) and (f), actions that will have no significant effect individually or cumulatively on the human environment, under normal circumstances, may be categorically excluded from the requirement to prepare an EA or EIS. If one of the enumerated conditions applies to the proposed action, document the condition on the REIR with the signature of environmental planning staff that has been delegated Command authority to do so. Proponents should note that a CATEX of the action under the NEPA does not relieve proponents from compliance with other Federal statutes (e.g., section 106 of the NHPA).

(1) Routine fiscal and administrative activities, including administration of contracts.

(2) Routine law and order activities performed by military personnel, military police, or other security personnel, including physical plant protection and security.

(3) Routine use and operation of existing facilities, laboratories,

and equipment.

(4) Administrative studies, surveys, and data collection.

(5) Issuance or modification of administrative procedures, regulations, directives, manuals, or policy.

(6) Military ceremonies.

(7) Routine procurement of goods and services conducted in accordance with applicable procurement regulations, E.O.s, and policies. **NOTE: This CATEX does not include procurement or acquisition of new technologies and weapons systems developed for the use in theater to U.S. military installations upon demobilization.**

(8) Routine repair and maintenance of buildings, facilities, vessels, aircraft, and equipment associated with existing operations and activities (e.g., localized pest management activities, minor erosion control measures, or painting, and refitting).

(9) Training of an administrative or classroom nature.

(10) Routine personnel actions.

(11) Routine movement of mobile assets (such as ships and aircraft) for homeport reassignments, for repair/overhaul, or to train/perform as operational groups where no new support facilities are required.

(12) Routine procurement, management, storage, handling, installation, and disposal of commercial items, where the items are used and handled in accordance with applicable regulations (e.g., consumables, electronic components, computer equipment, pumps).

(13) Routine recreational/welfare activities.

(14) Alteration of and additions to existing buildings, facilities, structures, vessels, aircraft, and equipment to conform or provide conforming use specifically required by new or existing applicable legislation or regulations (e.g., hush houses for aircraft engines, scrubbers for air emissions, improvements to storm water and sanitary and industrial wastewater collection and treatment systems, and installation of fire-fighting equipment).

(15) The modification of existing systems or equipment when the environmental effects will remain substantially the same and the use is consistent with applicable regulations.

(16) Routine movement, handling and distribution of materials, including HM/HW that are moved, handled, or distributed in accordance with applicable regulations.

(17) New activities conducted at established laboratories and plants (including contractor-operated laboratories and plants) where all airborne

emissions, waterborne effluent, external ionizing and non-ionizing radiation levels, outdoor noise, and solid and bulk waste disposal practices are in compliance with existing applicable Federal, state, and local laws and regulations.

(18) Studies, data, and information gathering that involve no permanent physical change to the environment (e.g., topographic surveys, wetlands mapping, surveys for evaluating environmental damage, and engineering efforts to support environmental analyses).

(19) Temporary placement and use of simulated target fields (e.g., inert mines, simulated mines, or passive hydrophones) in fresh, estuarine, and marine waters for the purpose of non-explosive military training exercises or RDT&E.

(20) Installation and operation of passive scientific measurement devices (e.g., antennae, tide gauges, weighted hydrophones, salinity measurement devices, and water quality measurement devices) where use will not result in changes in operations tempo and is consistent with applicable regulations.

(21) Short term increases in air operations up to 50 percent of the typical operation rate, or increases of 50 operations per day, whichever is greater. Frequent use of this CATEX at an installation requires further analysis to determine there are no cumulative impacts.

(22) Decommissioning, disposal, or transfer of Navy vessels, aircraft, vehicles, and equipment when conducted in accordance with applicable regulations, including those regulations applying to removal of HM.

(23) Non-routine repair and renovation, and donation or other transfer of structures, vessels, aircraft, vehicles, landscapes or other contributing elements of facilities listed or eligible for listing on the NRHP which will result in no adverse effect.

(24) Hosting or participating in public events (e.g., air shows, open houses, Earth Day events, and athletic events) where no permanent changes to existing infrastructure (e.g., road systems, parking and sanitation systems) are required to accommodate all aspects of the event.

(25) Military training conducted on or over nonmilitary land or water areas, where such training is consistent with the type and tempo of existing non-military airspace, land, and water use (e.g., night compass training, forced marches along trails, roads and highways, use of permanently established ranges, use of public waterways, or use of civilian airfields).

(26) Transfer of real property from DON to another military department or to another Federal agency.

(27) Receipt of property from another Federal agency when there is no anticipated or proposed substantial change in land use.

(28) Minor land acquisitions or disposals where anticipated or proposed land use is similar to existing land use and zoning, both in type and intensity.

(29) Disposal of excess easement interests to the underlying fee owner.

(30) Renewals and minor amendments of existing real estate grants for use of government-owned real property where no significant change in land use is anticipated.

(31) Land withdrawal continuances or extensions that merely establish time periods and where there is no significant change in land use.

(32) Renewals and/or initial real estate in grants and out grants involving existing facilities and land wherein use does not change significantly (e.g., leasing of Federally-owned or privately-owned housing or office space, and agricultural out leases).

(33) Grants of license, easement, or similar arrangements for the use of existing rights-of-way or incidental easements complementing the use of existing rights-of-way for use by vehicles (not to include significant increases in vehicle loading); electrical, telephone, and other transmission and communication lines; water, wastewater, storm water, and irrigation pipelines, pumping stations, and facilities; and for similar utility and transportation uses.

(34) New construction that is similar to existing land use and, when completed, the use or operation of which complies with existing regulatory requirements (e.g., a building within a cantonment area with associated discharges/runoff within existing handling capacities).

(35) Demolition, disposal, or improvements involving buildings or structures when done in accordance with applicable regulations including those regulations applying to removal of asbestos, PCBs, and other HM.

(36) Acquisition, installation, and operation of utility (e.g., water, sewer, electrical) and communication systems (e.g., data processing cable and similar electronic equipment) which use existing rights of way, easements, distribution systems, and/or facilities.

(37) Decisions to close facilities, decommission equipment, and/or temporarily discontinue use of facilities or equipment, where the facility or equipment is not used to prevent/control environmental impacts.

(38) Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site.

(39) Relocation of personnel into existing Federally-owned or commercially leased space that does not involve a substantial change affecting the supporting infrastructure (e.g., no increase in vehicular traffic beyond the capacity of the supporting road network to accommodate

such an increase).

(40) Pre-lease upland exploration activities for oil, gas, or geothermal reserves (e.g., geophysical surveys).

(41) Installation of devices to protect human or animal life (e.g., raptor electrocution prevention devices, fencing to restrict wildlife movement onto airfields, and fencing and grating to prevent accidental entry to hazardous areas).

(42) Reintroduction of endemic or native species (other than endangered or threatened species) into their historic habitat when no substantial site preparation is involved.

(43) Temporary closure of public access to DON property in order to protect human or animal life.

(44) Routine testing and evaluation of military equipment on a military reservation or an established range, restricted area, or operating area; similar in type, intensity and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where the DON was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable SOPs protective of the environment.

(45) Routine military training associated with transits, maneuvering, safety and engineering drills, replenishments, flight operations, and weapons systems conducted at the unit or minor exercise level; similar in type, intensity and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where the DON was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable SOPs protective of the environment.

b. Conditions Not Permitting the Use of a CATEX (section 6(e) in reference (f)). A CATEX will not be used if the proposed action meets one of the following conditions:

(1) Would adversely affect public health or safety.

(2) Involves effects on the human environment that are highly uncertain, involve unique or unknown risks, or which are scientifically controversial.

(3) Establishes precedents or makes decisions in principle for future actions that have the potential for significant impacts.

(4) Threatens a violation of Federal, state, or local environmental laws applicable to the DON.

(5) Involves an action that, as determined in coordination with the appropriate resource agency, may:

(a) Have an adverse effect on Federally-listed endangered/threatened species or marine mammals.

(b) Have an adverse effect on coral reefs or on Federally designated wilderness areas, wildlife refuges, marine sanctuaries, or parklands.

(c) Adversely affects the size, function, or biological value of wetlands and is not covered by a nation-wide or regional permit.

(d) Have an adverse effect on archaeological resources or resources (including but not limited to ships, aircraft, vessels, and equipment) listed or determined eligible for listing on the NRHP.

(e) Result in an uncontrolled or unpermitted release of HS, or require a conformity determination under the standards of the General Conformity Rule of reference (k).

c. CATEX Documentation. The administrative record on the decision to forgo preparation of an EA or EIS on the basis of one CATEX will be documented on the REIR. The REIR or a separate CATEX Decision Memorandum will identify the applicable CATEX number being used and the rationale for why that CATEX applies to the proposed action, or will specify the appropriate Condition(s) Not Permitting the Use of a CATEX (see paragraph 12201.3.b) and the intent to prepare an EA or EIS. The REIR or CATEX Decision Memorandum must be signed by the authorized environmental planning staff and the installation/Command CG/CO, and then returned to the Action Proponent, and retained per reference (l), Standard Subject Classification Code (SSIC) 5090.4. The REIR, CATEX Decision Memorandum, and any records or proposed action review correspondence must accompany the project file through project planning.

d. Documentation of Requirements for CATEX Approval. In the event certain conditions or requirements must be met to qualify for the CATEX, before, during, or following the implementation of the proposed Federal action, the environmental planning staff may specify those requirements in the CATEX Decision Memorandum or similar correspondence. The Action Proponent must acknowledge and agree to such conditions by signing and returning the Decision Memorandum or similar correspondence to the environmental planning staff, to remain with the file. The Action Proponent is responsible for communicating the conditions (including incorporation of conditions in contracting documents) to personnel carrying out the proposed action and tracking that conditions are appropriately implemented.

4. Environmental Assessment (section 9, part 1508 of reference (e))

a. Overview. An EA analyzes the potential environmental impacts of a proposed action. Based on the following criteria, an EA will result in either a Finding of No Significant Impact (FNSI) or a decision to prepare an EIS. An EA is prepared for those proposed actions that do not qualify for a CATEX, and when the Action Proponent:

(1) Initially predicts that the proposed action will not have a

significant impact on the environment.

(2) Is uncertain whether the effects of the proposed action will have a significant impact on the human environment.

(3) Has reason to believe the proposed action will be environmentally controversial.

b. Actions For Which an EA Must Be Prepared. The following are examples of actions that under normal circumstances would require an EA:

(1) Training exercises for which the impacts are unknown, are potentially significant, or have the potential for environmental degradation or controversy.

(2) Dredging projects that increase water depth over previously dredged or natural depths.

(3) Proposed land use that would impact the quality or quantity of tidelands or freshwater wetlands.

(4) Real estate acquisitions or outleases of land involving:

(a) New in/out-grants only (i.e., neither renewals nor continuances wherein land use remains the same).

(b) Substantive changes in existing land use.

(c) Renewals of agricultural or grazing leases that involve notably different animal stocking rates, agricultural practices, seasons of use, or conversions to or from cropland.

(5) Acquisition of any size or in/out-grants that may be considered environmentally controversial, regardless of the appropriation or intended use.

(6) Family housing projects when the resident population changes.

(7) New target ranges or range mission changes with new or increased environmental impact.

(8) Proposals for new low-altitude aircraft training routes or special use airspace and warning areas Per Federal Aviation Administration (FAA) regulations, proposals for airspace, except for prohibited area and alert area designations, are subject to environmental impact analysis in accordance with reference (a). Guidance for the environmental analysis of military airspace proposals is contained in reference (m); and other applicable regulations and statutes.

(9) Mission changes, base closures, relocations, consolidations, or deployments that would cause major long-term population increases or decreases in affected areas. EAs are not required where impacts are purely socioeconomic and involve no potential for significant environmental impacts.

(10) Any proposed activity that may adversely affect a Federally-listed threatened or endangered species, candidate species, or designated or recommended critical habitat of an endangered species. The EA does not replace the requirements for a biological assessment and consultation under reference (h) (see chapter 11 of this Manual for a complete discussion of endangered species requirements).

(11) Any activity that would adversely affect resources either listed or eligible for listing in the NRHP. Preparation of an EA does not replace the requirements for review of the proposed action under reference (i) (see chapter 8 of this Manual for a complete discussion of cultural resources requirements).

(12) Permanent closure or limitation of access to any areas previously open to public use (e.g., roads and recreational areas).

(13) Construction or any other action resulting in discharges to, or potential contamination of, an aquifer, watershed, or recharge zone as described in reference (n).

(14) Irreversible conversion of "prime or unique farmland" to other uses except when the proposed action is directly related to national defense (per section 1547(b) of reference (o)).

(15) Ocean disposal of wastes that are subject to an EPA or EPA-delegated permit.

(16) Award or termination of contracts involving substantial quantities of natural resources, wherein the military is the contracting agency.

(17) Any action for which the environmental effect is controversial.

c. EA Public Participation (section 4(b), part 1501 in reference (e)). In the preparation of an EA, CEQ regulations require agencies to involve the public to the extent practicable. Therefore, commands proposing an action will develop an appropriate public involvement strategy. In determining the extent to which public participation is practicable, consider the following factors:

(1) What individuals and organizations would be interested in or affected by the proposed action.

(2) The magnitude of the environmental considerations associated with the proposed action.

(3) The extent of anticipated public interest.

(4) Methods that would most effectively notify and involve the public.

(5) Any relevant issues of national security or classification.

d. EA Procedures/Responsibilities

(1) Action Proponent

(a) Following the determination that an EA should be prepared for a proposed action and using the information submitted on the REIR as a foundation, the Action Proponent must, in consultation with the installation environmental planning staff, compile the following information:

1. A clear, detailed description of the need for, and purpose (objectives) of the action, the proposed action, and its expected results.

2. A brief description of all considered alternatives, including the reasons for eliminating them from further consideration.

3. A description of the likely results of canceling the proposal (e.g., "no action" alternative) and not meeting the need for action.

4. A description of the potential adverse impacts that might result from engaging in the proposed action and any alternative actions considered in detail.

5. A list of the supporters and likely opponents of the proposed action and alternatives.

6. A list of the names of persons and organizations familiar with the proposal, a summary of any current responses to the proposal, and a list of additional persons or agencies to be contacted during scoping.

7. A description of any associated support or facility requirements that would be necessary to accomplish the proposed action and any other connected actions, similar actions, or cumulative actions (see paragraph 12202.20 for the definition of "Scope").

8. A list of other past, present, or reasonably foreseeable future actions with the potential, together with the proposed action, to cause cumulative environmental impacts.

(b) The action proponent is responsible for the EA preparation (exclusive of the EA conclusion and final recommendation) via contractor, EFD/EFA as a reimbursable service, installation/Command environmental staff, or Action Proponent staff (if the proposed action is not part of the mission of the affected Marine Corps activity). At the earliest opportunity, the Action Proponent must determine which entity will prepare the EA.

(2) Installation/Command Environmental Planning Staff. The installation/Command environmental planning staff will review the EA documentation provided by the Action Proponent and prepare draft recommendations of findings, a separate conclusion in the context of one of the alternatives identified here, and distribute all documentation to the Installation/Command EIRB for appropriate action.

(3) Installation/Command EIRB

(a) The Installation/Command EIRB will review the documentation and make one of the following determinations:

1. The proposed action will have no significant impact on the environment, a FNSI is appropriate, and the action may proceed as planned.

2. The proposed action as planned may have a significant impact on the environment unless prescribed mitigation measures are accomplished. The final recommendation will contain a full description of all required mitigation and monitoring necessary to ensure that no significant impacts will occur. These measures will be made a part of the FNSI, included in project funding, and incorporated into project design.

3. The proposed action cannot proceed as planned without a significant impact on the environment. However, a reasonable alternative to the proposal that was not originally evaluated in the EA can proceed without a significant impact. The final recommendation from the Installation/Command EIRB will contain a full description of the new preferred alternative and direct the EA to be revised appropriately.

4. A FNSI for the proposed action is inappropriate; significant impacts can be avoided only if the "no action" alternative is selected. The final recommendation will be to begin an EIS if the Action Proponent wishes to continue with the proposal. The determination should describe the significant impacts that cannot be avoided.

(b) Upon considering the EA and the conclusion of the environmental staff, the Installation/Command EIRB will prepare a recommended course of action (to include a draft FNSI, if appropriate) for consideration by the installation/Command CO/CG.

(4) Installation/Command CO/CG. The installation/Command CO/CG, upon consideration of the EA conclusion and Installation/Command EIRB recommendation, will take one of the following three actions:

(a) Finalize, approve, and issue a FNSI and initiate a course of action for proceeding with the selected action. Note that per reference (p) all required consultations for the proposed action, other than those related to permits, must be completed prior to signature of the FNSI.

(b) For proposed actions that fall within one of the categories set forth in paragraph 12201.5e, forward the proposed FNSI, EA, and a recommended course of action to the CMC (LF) for review and approval before the installation/Command CO/CG signs the FNSI.

(c) Direct the preparation of an EIS if the Action Proponent intends to proceed with the proposed action.

e. Coordinate with the CMC (LF)

(1) If the installation/Command CO/CG decides not to issue a FNSI and concludes that an EIS is required, notify CMC (LF). EIS notification shall occur prior to commencing EIS preparation or receiving any public or regulatory agency involvement.

(2) Notify CMC (LF) as soon as it becomes apparent that potentially sensitive public interest issues are involved with the preparation of an EA.

(3) For proposed actions that fall within one or more of the following categories, forward the proposed FNSI, EA, and recommended course of action to the CMC (LF) for review and appropriate action:

(a) The proposed action is, or is closely similar to, one that normally requires the preparation of an EIS.

(b) The proposed action is of a nature that is without precedent.

(c) The proposed action is to develop substantial acres of undeveloped land.

(d) The proposed action has or can be expected to have substantial public or congressional interest.

(4) Commands must promptly submit a copy of all published FNSIs and related EIRB recommendations (in the form of minutes taken during board meetings) to the CMC (LF).

f. Content of EA (section 9, part 1508 of reference (e)). EA preparation should follow the basic format provided in paragraph 12201.5e.

Following this format, the EA should:

(1) Describe the proposed action.

(2) Briefly discuss the purpose and need for the action.

(3) Describe reasonable alternatives considered (including the "no-action" alternative).

(4) Describe the existing environment within the area of effect for the proposed action.

(5) Describe the potential environmental impacts of the proposal and alternatives considered, paying special attention to the following actions:

(a) Address the potential impact on endangered or threatened species and/or their habitat.

(b) Satisfy the requirements of the General Conformity Rule under section 176(c) of reference (k), and the need to quantify GHG emissions.

(c) Satisfy references (q) and (r) by identifying and addressing in the EA disproportionately high and adverse human health and environmental

effects of Federal programs, policies, and activities on minority and low-income populations.

(d) Address the potential impacts to:

1. Resources listed in or eligible for listing in the NRHP.
2. Archaeological resources to comply with references (i)

and (s).

(6) Describe any avoidance, mitigation, or environmental monitoring requirements.

(7) List the agencies and persons consulted.

(8) Include in the appendix substantive comments, replies, and consultation correspondence from agencies or entities with relevant expertise.

g. Preparation of a FNSI

(1) Signature Authority. If the installation/Command CO/CG approves of the recommendation by the EIRB for a FNSI, he or she will finalize and sign the FNSI. For actions described in paragraph 12201.4e, the installation/Command CO/CG will seek the CMC (LF) review and approval before signing the FNSI.

(2) Contents. The FNSI will consist of a brief summary of the EA. Each main section of the EA (as described in paragraph 12201.4f) should be summarized in the FNSI, including mitigation and monitoring requirements that support the FNSI determination, but excluding the list of agencies, consultants, and correspondence. A Notice of the Availability (NOA) of a FNSI can be published in local newspapers vice the entire FNSI text. The NOA is published by the USMC to inform the public and others that a NEPA document is available for review.

(3) Publication

(a) Unless the proposed action meets one of the conditions in paragraph 12201.4g(3)(b), the Action Proponent is responsible for publishing the signed FNSI or the NOA in local newspapers for at least three consecutive days if practicable (preferably over a weekend to ensure higher public visibility). The proposed action may begin once the NOA is published.

(b) If the proposed action involves one of the following two conditions, the Action Proponent must make the FNSI available for public review (including in state- and area-wide clearing-houses and forward the FNSI to the CMC (LF) for publication in the *Federal Register*) for 30 days before making the final determination whether to prepare an EIS and before the action may begin. The conditions are:

1. The proposed action is, or is closely similar to, one that normally requires the preparation of an EIS

(e.g., there is a reasonable argument for the preparation of an EIS).

2. The nature of the proposed action is without precedent (e.g., if it is an unusual case, a new kind of action, or a precedent-setting case such as a first intrusion of even a minor development into a pristine area).

5. EIS (part 1502 in reference (e))

a. Overview. An EIS provides a full and unbiased discussion of significant environmental impacts and informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. Briefly, the EIS process includes public "scoping," the issuance of a draft EIS (DEIS), a final EIS (FEIS), a supplemental EIS (if applicable), and the opportunity for public comment at several stages of the process. The process culminates in the issuance of a ROD.

b. Significantly. As defined in paragraph 12202, Terms and Definitions, the term "significantly" provides a basis for determining whether a proposed action is a Major Federal Action Significantly Affecting the Quality of the Human Environment which requires the preparation of an EIS. While all aspects of the definition are important, commands should pay special attention to the following issues set forth:

(1) The Geographical Extent of the Action (section 27(b)(3), part 1508 of reference (e)). For example, construction and land use modification to support a limited maneuver or training exercise by an individual command may not have a significant effect on the environment. However, training exercises on a broad geographic scale involving diverse natural areas could have a significant effect on environmental quality.

(2) The Long-Term Impact of the Action (section 27(b)(6,7), part 1508 of reference (e)). Maintain an objective overview toward the magnitude of environmental effects of both the immediately contemplated action and future actions for which the proposed action may serve as a precedent and that could result in a cumulatively significant impact.

(3) The Risk Potential (section 22, part 1502 of reference (e), section 27(b)(5), part 1508 of reference (e)). For example, even though the environmental impact of an efficiently and safely operated fuel depot may not be significant, if a massive oil spill is reasonably foreseeable in the lifetime of the project, the effects of an oil spill could render significant the effects of construction or operation of such a depot.

(4) Sites Having Existing or Possible Historic, Architectural, or Archaeological Interest (section 27(b)(8), part 1508 of reference (e)). (See chapter 8 of this Manual.)

(5) The Potential Impact on Endangered or Threatened Species, and/or Their "Critical Habitat" as designated by the United States Fish and Wildlife Service or National Marine Fisheries Service (section 27(b)(9), part 1508 of reference (e)). (See chapter 11 of this Manual.) An EIS is required when an

action significantly affect a Federally listed threatened or endangered plant or animal species, a Federal candidate species, a species proposed for Federal listing, or critical habitat.

c. Actions for Which EISs Must Be Prepared. The following are examples of actions that may have a significant impact on the quality of the human environment or are potentially controversial in environmental effects and, therefore, require preparation of an EIS by an action proponent:

(1) Large dredging projects or dredging projects where dredged material disposal may result in significant impacts.

(2) Proposed filling in tidelands/wetlands in which a U.S. Army Corps of Engineers Section 404 individual permit is required.

(3) Establishment of major new installations.

(4) Major land acquisitions that result in a change in how the property is used.

(5) New sanitary landfills.

(6) Disposal of biological or chemical munitions and pesticides or herbicides other than in the manner in which they are authorized for use or disposal.

(7) When an action is among those listed above, closely analogous to the same, or when an EA concludes impacts to be significant or environmentally (scientifically) controversial, the action proponent will prepare an EIS using procedures outlined in this instruction. The action proponent shall notify CMC (LF) before commencing an EIS.

d. EIS Preparation

(1) General (section 2, part 1502 of reference (e)). To achieve the NEPA goal of preparing a concise and useful statement, Action Proponents must prepare an EIS per the format in paragraph 12201.5e, following these guidelines:

(a) Write an analytic, rather than encyclopedic, EIS.

(b) Discuss impacts in proportion to their significance. Briefly discuss issues that are less significant. As in a FNSI, write only enough to show why more study is not warranted.

(c) Keep the EIS concise and no longer than is necessary to comply with reference (a), these regulations, and regulations issued by the CEQ. Length should vary first with potential environmental issues and then with project scope.

(d) Outline the criteria for selecting alternatives.

(e) Outline the range of alternatives, including a "no action"

alternative, to be discussed in the EIS and considered by the ultimate decision maker or by the lead agency if the DOD is a cooperating agency.

(f) Cognizant commands must not make irreversible commitments of resources that change the physical environment before making a final decision.

(g) To satisfy references (q) and (r), identify and address in the EIS disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations.

(2) Document Length (section 7, part 1502 in reference (e)). Restrict the document to pertinent facts, excluding material not directly applicable to the expected impact. The EIS must contain sufficient information and baseline data to support the conclusions reached. Supporting data can be included in the EIS as appendices.

(3) Scoping (section 7, part 1501 in reference (e)) and Lead and Cooperating Agencies (sections 5 and 6 , part 1501 of reference (e))

(a) The scoping process will:

1. Invite the participation of affected Federal, state, and local agencies, any Native American tribe, minority and low-income populations, and other interested persons.

2. Determine the scope and the significant issues to be analyzed in depth in the EIS.

3. Identify and eliminate from detailed study the issues that are not significant or that have been covered by prior environmental review. Narrow the discussion of these issues to a brief presentation of why they will not have a significant effect on the human environment or provide a reference to their coverage elsewhere.

4. Allocate assignments for the preparation of the EIS among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement.

5. Indicate any public EAs and other EISs that are being, or will be, prepared and that are related to, but are not part of, the scope of the EIS under consideration.

6. Indicate the relationship between the timing of the preparation of an EIS and the agency's tentative planning and decision making schedule.

7. Identify other environmental review and consultation requirements (e.g., section 7 of reference (h), the compliance requirement of reference (i), reference (k), or reference (t)), so the lead and cooperating agencies may prepare other required analyses and studies concurrently with the EIS.

8. Identify environmental permits and regulatory agency approvals required for the project and the relationship between the timing of permits and approvals with the start of the proposed action.

(b) These scoping functions may be carried out in the context of a public, informal meeting at which written responses or oral presentations resulting from the public notices may be received. Such meetings, while not mandatory, may be held whenever practicable. There is no authority for the payment of expenses incurred by any person(s) in the preparation and presentation of information at these meetings.

(4) Public Notification (section 6, part 1506 of reference (e)). As soon as practicable after the cognizant command has determined that an EIS is required and the proper chain of command has been notified, undertake the following efforts to involve agencies and the public appropriately and to focus the environmental analysis on the significant issues:

(a) The Activity/Action Proponent drafts a NOI to prepare an EIS and forwards it to the installation/Command CO/CG for approval. The installation/Command CO/CG forwards the NOI appropriate Region (e.g., MCI East, MCI West, MCI Pacific) for the Regional EIRB review and approval (or in the case of actions proposed by the Regions, to the Headquarters EIRB [HQEIRB]). If approved, the Region forwards the NOI to the CMC (LF) for HQEIRB review and approval. If approved by the HQEIRB, the request to publish the NOI is forwarded to the OASN (E,I&E) or a designee for signature.

(b) The CMC (LF) must publish the NOI to prepare an EIS in the *Federal Register*.

(c) Action Proponents must mail the NOI to national organizations that the cognizant command reasonably expects to be interested in the matter. In all cases, the cognizant command must mail the notice to those who have requested it.

(d) The NOI will:

1. Solicit the comments and suggestions of affected Federal, state, and local agencies; any affected Native American tribes or NHOs; the proponent of the action; and any other interested persons (including those who might not be in accord with the action on environmental grounds).

2. Briefly describe the proposed action and the scoping process to be undertaken.

3. Include a public notice of any scoping meetings to be held. This notice may be published separately from the NOI, but must be published no less than 15 days before the scheduled meeting, regardless of whether it is an individual notice or part of the NOI.

4. Be mailed directly to concerned agencies, organizations, and individuals and may be published in local newspapers.

(e) Per reference (q), whenever practicable and appropriate, the

NOI and announcement of the scoping meeting must be translated for non-English speaking populations.

(f) In the case of an action with effects of primarily local concern, the NOI can include compliance with the affected state's public notice procedures of comparable actions.

(5) Time Limits (section 8, part 1501, and section 10, part 1506 in reference (e)). The EPA publishes a weekly notice in the *Federal Register* listing the EISs filed during the preceding week. The following schedule, calculated from the date of publication of the EPA notice, must be followed:

(a) The DEIS should be made available to the public 15 days prior to any public hearing or meeting on the DEIS.

(b) The FEIS may not be filed less than 45 days after publication of the NOI of the DEIS.

(c) Any ROD on a proposed action cannot be issued until 90 days after issuing the DEIS, and no less than 30 days after issuing the FEIS.

e. Format (section 10-18, part 1502 of reference (e)). Print the document on 8-1/2 by 11-inch bond paper; foldout sheets may be used as long as the 11-inch vertical dimension is retained. Use the following format for all EIS documents and, as appropriate, for EA documents:

(1) Cover Sheet. The one-page cover sheet includes the following:

(a) A list of the responsible agencies, including the lead agency and any cooperating agencies.

(b) The title of the proposed action that is the subject of the environmental analysis (and if appropriate, the titles of related cooperating agency actions), together with states, counties, and other jurisdictions where the action is located.

(c) The name, address, and telephone number of the person at the responsible command who can supply further information.

(d) A designation of the analysis as an EA, DEIS, FEIS, or draft or final supplement.

(e) A one-paragraph abstract of the analysis.

(f) The date by which comments must be received.

(2) Summary. The summary appears at the beginning of the document, immediately follows the cover sheet, usually will not exceed 15 pages, and includes the following:

(a) Indication of whether the analysis is an EA, DEIS, or FEIS.

(b) The name of the action and whether it is administrative or

legislative.

(c) A brief description of the action and what geographical region (including state and county, as applicable) is particularly affected.

(d) A summary of the adverse environmental impacts and mitigating actions considered. This summary includes a statement as to whether the action is subject to the General Conformity Rule under section 176(c) of reference (k), and if so, whether applicable requirements have been met.

(e) A list of considered alternatives.

(f) A statement as to whether the action may have a significant environmental impact or may be environmentally controversial.

(g) For DEISs, a list of all Federal, state, and local agencies from which comments have been requested; for FEISs, a list of all Federal, state, and local agencies and other sources from which written comments have been received

(h) The dates the DEIS and FEIS were made available to the CEQ and public.

(3) Purpose and Need. This section, which actually begins the body of the analytic portion of the document, briefly specifies the underlying need for the project and its objectives for which the Marine Corps or Action Proponent is presenting the proposed action and alternatives. It succinctly and objectively justifies the proposed action and explains the essential requirements that must be satisfied to achieve the purposes of the proposed action.

(4) Alternatives, Including the Proposed Action

(a) This section is the heart of the EA or EIS. Based on the information and analysis presented in paragraphs 12201.5d(5) and (6) sections 5 and 6, it presents the environmental impacts of the proposal and the alternatives in a comparative (matrix) form, thus sharply defining the issues and providing a basis for choice among the options by the decision makers and the public.

(b) Rigorously explore and objectively evaluate all reasonable alternative actions, particularly those actions that might enhance environmental quality or avoid some or all of the adverse environmental effects. Include, where relevant, alternatives to the proposed action not within the existing authority of the agency. If applicable, conduct an analysis of such alternatives, and report the results relating to their environmental benefits, costs, and risks. This analysis should accompany the proposed action through the agency review process. If a cost/benefit analysis relevant to the choice among environmentally different alternatives is prepared, discuss the relationship between the analysis and any analysis of unquantified environmental impacts, values, and amenities as per section 23 of part 1502 of reference (e). The analysis evaluates qualitative and quantitative considerations, including factors not related to environmental

quality, that are likely to be relevant and important to a decision. This process will prevent a premature foreclosure of options that might enhance environmental quality or have less detrimental effects.

(c) Alternatives include, but are not limited to, the following examples:

1. Taking no action.
2. Postponing action.
3. Selecting actions of a substantially different nature that would meet mission and project objectives and have different environmental impacts.
4. Adopting different designs or details of the proposed action that would present different environmental impacts (including mitigation measures).
5. Those alternatives not within the authority of the Marine Corps or Action Proponent to implement but that would still meet project objectives.

(d) In each case, the analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the proposed action and each reasonable alternative. In all cases, however, evaluate the impact of not proceeding with the proposed action ("no action" alternative). Throughout the EA or EIS, the discussion and analysis should be structured to prevent a premature foreclosure of options that might enhance environmental quality or have less detrimental effects.

(5) Existing Environment in which the Proposed Action Would Occur. Succinctly describe the existing environment within the area that would be affected by the proposed action, including existing and anticipated uses and activities in the area (i.e., a baseline description from which to compare the probable impact). The descriptions will be no longer than necessary to understand the effects of the proposed action. In the analysis, present the interrelationship of other Federal and non-Federal actions that might cause cumulative environmental impacts with the proposed action. The amount of detail provided in such descriptions will be commensurate with the extent and impact of the action and with the amount of information required at the particular level of decision making.

(6) Environmental Consequences. This section forms the scientific and analytic basis for the comparison of impacts presented in the alternatives section. The discussion will include the proposed action, any adverse environmental impacts that cannot be avoided should the proposal be implemented, the relationship between short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. This section does not duplicate the discussions in the alternatives section, but does include the following discussions:

(a) Direct effects and their significance; i.e., an analysis of the positive and negative effects of the proposed action. The attention given to different aspects of the human environment varies according to the nature, scale, and location of proposed actions. Give primary attention to a discussion of those aspects most evidently impacted by the proposed action.

(b) Indirect effects and their significance. Include a discussion of secondary or indirect consequences for the environment in the analysis. Many major Federal actions, especially those that involve construction (e.g., new installation or joint use of an installation), stimulate or induce secondary effects in the form of associated investments and changed patterns of social and economic activities. Such secondary effects, by their impact on existing community facilities and activities, by inducing new facilities and activities, or by changing natural conditions, often are more substantial than the primary effects of the original action. For example, estimate the effects of the proposed action on population and growth if they may be significant. Evaluate the effect of any possible change in population patterns or growth upon the resource base, especially those that may impact low-income and minority populations, such as impacts on land use, water resources, and public services of the area in question. Consider major Federal actions that may cause indirect effects on the natural and physical environment off site or later in time.

(c) Possible conflicts between the proposed action and the objectives of Federal, state, and local (and in the case of a reservation, Native American tribe) land use plans, policies, and controls. Discuss how the proposed action will conform or conflict with the objectives and specific terms of approved or proposed Federal, state, and local land use plans, policies, and controls for the area affected, including those developed in response to environmental legislation. Where a conflict or inconsistency exists, describe the extent to which the agency has reconciled its proposed action with the plans, policies, or controls. In the absence of full reconciliation, document justification for any decision to proceed.

(d) The environmental effects of alternatives, including the "no action" alternative. Base comparisons as outlined in paragraph 12201.5e(4), preceding.

(e) Energy requirements and conservation potential of various alternatives and mitigation measures. Address the energy impact of the proposed action and alternatives, including GHG, alternative energy sources, conservation and mitigation potential.

(f) Any irreversible or irretrievable commitments of resources that would be involved if the proposed action is implemented. From a survey of unavoidable impacts, identify the extent to which the action irreversibly curtails the range of potential uses of the environment. "Resources" (both renewable and nonrenewable) means the natural and cultural resources committed to, or lost by, the action, as well as labor, funds, and materials committed to the action.

(g) The relationship between local short-term use of the environment and maintenance and enhancement of long-term productivity.

Briefly discuss the extent to which the proposed action involves trade-offs between short-term environmental gains and the expense of long-term losses (and vice versa). Discuss the extent to which the proposed action forecloses future options. In this context, "short-term" and "long-term" do not refer to any fixed periods, but should be viewed in terms of the environmentally significant consequences of the proposed action.

(h) Urban quality, historic architecture, cultural value, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

(i) Ways to mitigate and/or monitor adverse environmental impacts (if not previously discussed). When appropriate, discuss mitigation measures in the form of avoidance, design modification, rehabilitation, preservation, or compensation; address the extent of countervailing benefits derived from implementing mitigation measures and/or monitoring programs to avoid or reduce some or all of the adverse environmental effects. In the EIS, mitigation measures and monitoring programs, including implementing feasibility and funding availability, should be discussed in the context of "potential mitigation measures" and "potential monitoring programs." The decision to commit to a particular mitigation measure or monitoring program is made in the ROD. In many cases, mitigation measures should also be coordinated with cognizant regulatory agencies.

(j) Cumulative impacts as appropriate and in context with the scope and magnitude of the proposed action. Rigorously examine the potential overlap of the proposed action and alternatives with the impacts of current and future actions planned in the immediate vicinity of the proposed action. Include a discussion any programs currently in place to monitor impacts from previous actions and whether the observations from such programs inform the assessment of impacts anticipated from the proposed action. Also discuss any programs that should be put in place to monitor long-term impacts on specific resources.

(k) Any probable and unavoidably adverse environmental effects should the proposal be implemented. Briefly discuss those effects that are adverse, not amenable to mitigation, and unavoidable under the proposed action.

(7) List of Preparers. Prepare environmental statements using an interdisciplinary approach that will ensure the integrated use of the natural, social sciences, and the environmental design arts. To verify that this approach was undertaken, list the names, together with the qualifications (expertise, experience, professional disciplines) of the persons primarily responsible for preparing the EA or EIS, or significant background papers, including basic components of the statement. Where possible, identify the persons who are responsible for the particular analysis, including analyses in background papers. Normally the list will not exceed two pages.

(8) Distribution List. Include in the document a complete distribution list, including the names and addresses of all the organizations, agencies, and individuals to whom copies of the statement are

to be sent.

(9) Correspondence. List all Federal, state, and local agencies, and their records of correspondence related to the proposed action, from which comments and coordination have been requested.

(10) Appendix. An appendix to an EIS is optional; however, if used, it will:

(a) Consist of material prepared in connection with the EIS (as distinct from material that is not so prepared and that is incorporated by reference).

(b) Normally include material that substantiates any analysis fundamental to the impact statement.

(c) Normally be analytic and relevant to the decisions to be made.

(d) Circulate with the EIS or be readily available upon request.

f. Incorporation by Reference (section 21, part 1502 of reference (e)). As much as possible, commands preparing an EIS must incorporate material into the document by reference when doing so will cut down on bulk without impeding agency and public review of the action. Cite the incorporated material in the statement and briefly describe its contents. Do not incorporate material by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Do not incorporate by reference material based on proprietary data that is itself not available for review and comment.

g. Incomplete or Unavailable Information (section 22, part 1502 of reference (e)). For the purposes of this section, "reasonably foreseeable significant adverse impacts" include those impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason. When the command preparing the EIS is evaluating reasonably foreseeable significant adverse effects on the human environment and there is incomplete or unavailable information, it must make clear that such information is lacking. For such situations it can take the following actions:

(1) Include the information in the EIS if the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant.

(2) Include the following items in the EIS, if the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known (e.g., the means for obtaining it are beyond the state of the art):

(a) A statement that such information is incomplete or unavailable.

(b) A statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment.

(c) A summary of existing credible scientific evidence that is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment.

(d) The Action Proponent's evaluation of such impacts based on theoretical approaches or research methods generally accepted in the scientific community.

h. Chain-of-Command Review of DEIS/FEIS and NOA. Following the Installation/Command EIRB recommendation, the installation/Command CO/CG forwards the DEIS/FEIS and NOA to the Region (e.g., MCI East, MCI West, MCI Pacific) for Regional EIRB approval, as appropriate. If approved by the Regional EIRB, the DEIS/FEIS and NOA are forwarded to CMC (LF) for HQEIRB approval. If approved by the HQEIRB, the DEIS/FEIS is forwarded to the ASN (E,I&E) or a designee for signature. The CMC (LF) must also deliver copies of the document to EPA Headquarters. The EPA will send a NOA for publication in the Federal Register; in conjunction with that announcement, HQMC will submit a Notice of Public Meetings for publication in the *Federal Register*. Coordination with EPA is completed for draft and final EISs, for RODs, and for EAs and FNSIs that are of national concern, are unprecedented, or normally require an EIS. The Action Proponent distributes the DEIS/FEIS to interested parties. Note that per reference (p), all required consultations for the proposed action, other than those related to permits, must be completed prior to publication of the FEIS.

i. ROD (section 2, part 1505 of reference (e))

(1) The ROD is a public record of the decision to select one alternative for implementation from among the alternatives considered in detail in an EIS. The document, as proposed by the activity/Action Proponent, and approved by the appropriate Installation/Command and Regional EIRBs, will be finalized by the CMC (LF) on behalf of the HQEIRB and will state the decision, identify the alternatives considered (including those that were environmentally preferable), and discuss all factors, including non-environmental considerations, that influenced the decision. The ROD will commit the Action Proponent to the appropriate mitigation, if applicable, to minimize environmental harm, and to identify those measures that were considered, but not selected, for implementation. Mitigation measures required as a result of a regulatory consultation must be specified in the ROD. Additionally, any monitoring program associated with selected mitigation measures will be addressed. After the ROD is signed, it becomes the responsibility of the activity/Action Proponent to track implementation of mitigation measures and review the effectiveness of monitoring programs.

(2) The ROD must be drafted by the activity/Action Proponent in coordination with the CMC (LF) environmental planning staff. The

Installation/Command EIRB must review the ROD and forward it with its recommendation to the installation/Command CO/CG for approval (or, for actions proposed by the Regions, directly to the HQEIRB). The installation/Command CO/CG must forward the ROD to the appropriate Region (e.g., MCI East, MCI West, MCI Pacific) for Regional EIRB review and approval. If approved, the Region will forward the ROD to CMC (LF) for consideration by the HQEIRB and approval. The CMC (LF) must forward the ROD to the DASN I&E or a designee for signature. The CMC (LF) must publish the signed ROD in the *Federal Register*, and the command or Action Proponent publishes the document in the local newspaper(s) and mails it to appropriate agencies, organization, and individuals.

## 6. Other Issues

a. Contractor Involvement in NEPA Documentation (section 5, part 1506 of reference (e)). An EIS, like an EA, frequently is prepared by a contractor. To obtain unbiased analyses, the contractor must be selected in a manner avoiding any conflict of interest. **Therefore, contractors will execute disclosure statements approved by the Marine Corps, which specify that the contractors have no financial or other interest in the outcome of the project.** Contractor efforts should be closely monitored throughout the process to ensure an adequate document and avoid extensive, time consuming, and costly revisions. Project planners, the environmental planning staff, the Action Proponent, and area land managers should be continuously involved in the process. The executed disclosure statements shall become a part of the Administrative Record for the action.

b. Cooperation with Federal, State, and Local Agencies (section 2, part 1506 of reference (e)). To eliminate duplication with Federal, state, and local procedures and to fully address their requirements, commands must cooperate with other agencies as much as possible. Such cooperation could include:

(1) Joint planning processes.

(2) Joint environmental research and studies, including assessments of the presence or special needs of minority and low-income groups (including foreign language interpretation and collection and analysis of demographic characteristics).

(3) Joint public meetings/public hearings (except where otherwise provided by statute).

(4) Joint EAs or EISs.

c. Administrative Record. The administrative record is a critical component of the NEPA process. The administrative record consists of all documents and materials (including intra-office e-mails) directly or indirectly considered by the decision maker. Should a decision be challenged, a reviewing court will review the decision primarily (if not solely) based on the administrative record. The decision maker is responsible for assembling and maintaining the administrative record. To this end, commanders/supervisors/officers-in-charge must ensure that all

administrative record documents and materials are properly maintained and readily retrievable upon request. The administrative record must be retained after the proposed action has taken place, in the event that the action is challenged after the fact, per reference (l), SSIC 5090.4. For CATEXs, the administrative record includes the REIR and the CATEX Decision Memo, as well as the results of consultations or coordination.

d. Classified EA and EIS Documents (section 3(c), part 1507 of reference (e))

(1) The fact that a proposed action is of a classified nature does not relieve the Action Proponent from complying with the requirements of this chapter. Prepare, safeguard, and disseminate the DEIS and FEIS, as well as the EA, per the requirements applicable to classified information. When feasible, organize these documents in such a manner that classified portions are included as appendices so the unclassified portions can be made available to the public. Coordinate the review of classified NEPA documentation with the EPA for requirements applicable to section 309 of reference (k).

(2) An EA or EIS containing classified information, or other information for which the public release is prohibited by law, serves the same purpose as an EA or EIS without classified material, even though not all of its contents are subject to public review and comment. The entire package must accompany the proposal through the decision making process. The content of an EA or an EIS containing portions that cannot be released to the public must meet the same overall content requirements applicable to a fully published EA or EIS.

e. Emergency Actions. Where emergency circumstances outside Marine Corps control make it necessary to take an action with significant environmental impact without observing the provisions of CEQ regulations, the Marine Corps must consult with the CEQ about alternative arrangements. Action Proponents must contact the CMC (LF), as soon as practicable, to allow consultation with the SECNAV and the CEQ. The CMC (LF) will consult with the CEQ and make alternative arrangements as appropriate with the CEQ to effect NEPA compliance for emergency actions. Alternative arrangements are limited to those aspects of a proposal that must proceed on an emergency basis. Remaining action to be taken is subject to normal NEPA review. Ordinarily, the failure to plan properly does not establish an emergency. Note: Regulations implementing other environmental laws (e.g., references (h) and (u)) contain requirements for consultation with the applicable regulatory agencies for actions taken relative to emergency circumstances.

f. Continuing Activities

(1) CEQ regulations (section 18, part 1508 of reference (e)) define major Federal actions subject to evaluation under NEPA to include, among other things, "new and continuing activities". Per reference (f), *continuing activities* that may necessitate the preparation of a NEPA document include activities that are presently being carried out in fulfillment of DON mission and function, including existing training functions, where:

(a) The currently occurring environmental effects of the activity have not been previously evaluated in a NEPA document, and there is a

discovery that substantial environmental degradation is occurring, or is likely to occur, as a result of ongoing operations (e.g., a discovery that significant beach erosion is occurring as a result of continuing amphibious exercises, new designation of wetland habitat, or discovery of an endangered species residing in the area of the activity).

(b) There is a discovery that the environmental effects of an ongoing activity are significantly and qualitatively different or more severe than predicted in a NEPA document prepared in connection with the commencement of the activity.

(2) A substantial change in a continuing activity (such as a substantial change in operational tempo, area of use, or in methodology/equipment), which has the potential for significant environmental impacts, should be considered a proposal for a new action and be documented accordingly.

(3) Under this definition, many installation operations may qualify as "continuing activities." Since NEPA documentation is required for continuing activities under certain circumstances, action sponsors must coordinate all continuing activities with the installation environmental planning staff. Should an EA or an EIS be required for a continuing activity, the no-action alternative is to continue the activity under the current condition at the installation. The environmental baseline for continuing activities is the present condition at the installation and not a pristine condition.

(4) When a continuing activity has the potential for significant environmental degradation, or when required by the affected installation environmental planning staff, the action sponsor must provide a brief on the action to the affected installation/Command EIRB. This brief will include a description of the proposed action, the need for the proposed action, and the objectives to be obtained by the proposed action. The description of the proposed action should include the proposed training, its location, and its timing.

g. Acquisition Programs

(1) References (a) and (b) apply to all Acquisition programs regardless of acquisition category (ACAT) or size. The Acquisition Program Manager, as the action proponent, must comply with references (a) and (b) in accordance with references (v) and (w).

(a) References (a) and (b) apply to Urgent programs when the acquisition is tested, trained, fielded, and/or disposed of at a peace-time location.

(b) In accordance with reference (b), section 2-5, actions where acquisition programs are fielded directly to theater to support the warfighter or to support international relief efforts are exempt from further analysis when:

1. Per reference (b) 2-5 (ii), the actions are taken by the President.

2. Per reference (b) 2-5 (iii), the actions are taken by or pursuant to the direction of the President or Cabinet officer when the national security or interest is involved or when the action occurs in the course of an armed conflict.

3. Per reference (b) 2-5 (vii), the action is a disaster and emergency relief action.

(2) The Acquisition Program Manager shall use the methodology in section 12201.2 of this document for all program actions over the program's lifecycle at peace-time locations.

(a) The Program Manager, as the action proponent for the proposed action, shall coordinate and converse with the Installation Environmental Planning Staff at the installations(s) where the action is to occur. This coordination includes, at a minimum, the submittal of an REIR to the Installation Environmental Planning POC for each location where the action is to occur.

(b) If the Program Manager, in coordination with the Installation Environmental Planning Staff, determines that a CATEX applies, then the Program Manager shall sign the REIR and shall prepare a Decision Memorandum for the administrative record.

(c) If the Program Manager, in coordination with the Installation Environmental Planning Staff, determines that the acquisition proposed action requires an EA or EIS, then the Acquisition Program shall fund and prepare the EA or EIS. The program shall rely on the Installation Environmental Planning staff to provide expertise regarding their installation's environment and impacts thereto.

1. An EA prepared and funded by the program office shall utilize both the Installation EIRB and Marine Corps Systems Command EIRB.

2. An EIS prepared and funded by the program office shall utilize the Installation EIRB, Marine Corps Systems Command EIRB, and the HQMC EIRB.

3. The acquisition program EA signature authority is the Commander Marine Corps Systems Command, in accordance with reference (v). An acquisition EA shall also have a second signature for the CO/CG of the installation where the action will occur.

4. Prior to signature on any acquisition EA or EIS, Marine Corps Systems Command and the Installation Environmental Planning Staff must agree who shall pay for the mitigation actions prescribed in the EA or EIS.

(d) The Acquisition Program Manager shall document all NEPA and reference (b) plans and resulting actions in the Programmatic Environmental, Safety and Occupational Health Evaluation in accordance with reference (w).

(3) In accordance with reference (w), the Component Acquisition Executive of the lead executive component or designee is the approval

authority for system-related NEPA and reference (b) documentation. If the lead executive component for a Joint Program is not the United States Marine Corps, then the Marine Corps Program Manager shall use the methodology in paragraph 12201.2 of this document to ensure compliance with references (a) and (b) for Marine Corps specific actions.

(4) The Acquisition Program Manager shall provide system specific analyses and data to support other organizations analyses under references (a) and (b), including documentation prepared by Installation Environmental Planning Staff.

h. Special Use Airspace

(1) Special Use Airspace actions, except for designations of prohibited areas and alert areas, are subject to environmental impact analysis in accordance with reference (a).

(2) Internal FAA guidance for the environmental analysis of Special Use Airspace proposals is contained in reference (x); guidance for non-FAA action proponents is provided in reference (m); reference (y) and reference (z).

(3) A more detailed discussion on how to complete environmental documentation relative to Special Use Airspace proposals is provided in the reference (aa).

i. P2

(1) The EPA evaluates EISs for incorporation of P2 measures to assist Federal agencies in acknowledging and receiving credit for commitment to P2.

(2) The term "pollution prevention" includes equipment or technology modifications; process or procedure modifications; reformulation or redesign of products; substitution of raw materials; and improvements in housekeeping, maintenance, training, or inventory control. During all stages of project formulation, from early planning and NEPA documentation through implementation, Action Proponents should seek opportunities to incorporate P2 into their programs.

(3) The following list describes areas where P2 opportunities may be appropriately addressed during the NEPA scoping and subsequent environmental review phases:

(a) The definition of the project's purpose and need (it should be clearly identified and not slanted to support the proponent's desires, which could limit P2 options).

(b) The project design specification and standards.

(c) The sizing of a project (e.g., a smaller project may affect less habitat, have fewer impacts on soil erosion and water quality, and/or result in less induced growth).

- (d) The facility location.
- (e) The range of alternatives (e.g., whether P2 opportunities are included).
- (f) Rejection of certain alternatives.
- (g) Emphasis on environmental requirements (whether the focus is on P2, source reduction, innovative technologies, or traditional end-of-pipe, add-on controls).
- (h) The proposed action's potential to prevent pollution.
- (i) The secondary effects of a proposed action, which may discourage P2.
- (j) The mitigation measures incorporated into the proposal (e.g., some mitigation measures may have more P2 benefits than others, and significant P2 measures may require a basic change in the project).

(4) Further guidance on compliance with reference (ab), as well as P2 strategies, can be found in chapters 6, 7, and 15 of this Manual.

j. Tiering ((section 20, part 1502, and section 28, part 1508 of reference (e)). Reference (e) encourages the use of tiering whenever appropriate to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for discussion at each level of the environmental review. An EA or EIS of broad scope discussing the impacts of a wide-ranging or long-term phased program, referred to as a programmatic EA or EIS, can be followed by an EA or EIS of more narrow scope concentrating solely on issues specific to the actions being considered. Tiering is appropriate when it helps the Action Proponent to focus on issues that are ripe for decision and excludes from consideration issues already decided or not yet ripe. This results in a stepped approach to planning and decision making.

(1) Tiering is appropriate when the sequence of statements or analysis is:

(a) From a broad program, plan, or policy (not necessarily site-specific) EIS to a program, plan, or policy statement of lesser scope or to a site-specific EA or EIS. For example, a national program providing for mineral exploration on military-held lands with a subsequent analysis tiered for each installation impacted, or the initiation of a new training apparatus where the use of the apparatus itself may impact the environment, with subsequent tiered analysis at each site proposed for locating such training.

(b) From an EIS on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent EIS or EA at a later stage (such as environmental mitigation).

(2) Content of Programmatic EIS. If a programmatic EA or EIS is prepared as the initial analysis, from which subsequent site-specific

analyses will be tired, such documents shall include:

(a) A description of the related stages, sites, or actions that may ultimately be proposed in as much detail as presently possible.

(b) The implementing program factors that are known at the time of EIS preparation.

(c) The environmental impacts resulting from establishing the overall program that would be similar for subsequent stages, sites, or actions as further implementation plans are proposed.

(d) The appropriate mitigation measures that would be similarly proposed for subsequent stages, sites, or actions.

(3) Preparation of a Tiered Analysis

(a) When the subsequent tier itself may have significant impact on the quality of the human environment or when an impact statement is required by these procedures, use the EIS as the analytical document for a staged or site-specific analysis subsequent to the programmatic EIS. Otherwise, evaluate the impacts of the subsequent tiered action in an REIR or an EA to fully assess the environmental impacts of the action.

(b) In addition to the discussion required by these procedures for inclusion in EA and EIS documents, each subsequent tiered analysis must:

1. Summarize the program-wide issues discussed in the programmatic statements and incorporate discussions from the programmatic statement by reference.

2. Concentrate on the issues specific to the subsequent action.

3. State where the programmatic document is available for review.

(4) Programmatic EISs and all the subsequent tiered EISs will be prepared, circulated, and distributed in the same fashion as required of any other EIS. Commands must prepare, circulate, and distribute tiered EAs and resulting FNSIs per the procedures applicable to EAs.

k. Supplemental Statements (section 9, part 1502 of reference (e)). Prepare supplements to either a DEIS or FEIS if substantial changes are made in the proposed action and they are relevant to environmental concerns, or if significant new circumstances or information arises that is relevant to environmental concerns. Prepare, circulate, and file such supplements in the same fashion as a DEIS or FEIS. Scoping is not required.

l. Procedures for Conducting Public Meetings under NEPA. Public meetings may have different formats including formal public hearings in which the Marine Corps receives testimony, public meetings that include a presentation and a question and answer session, and informal open houses. A

public meeting could include multiple formats, such as an open house followed by a public hearing. Public hearings are typically conducted in conjunction with preparation of an EIS, include a court reporter, and facilitate the recording of public comments. However, the Action Proponent may elect to conduct public hearings for an EA. Conduct hearings as follows:

(1) Guidelines and Standards. The Action Proponent, in coordination with the appropriate Region and CMC (LF), determines whether a public hearing will be held. Public hearings are appropriate in the following situations:

(a) When the proposed agency action will have a direct or peculiar environmental impact on the people residing in a particular geographic area.

(b) When public organizations or members of the public possess expertise concerning the environmental impact of the action that may not otherwise be available.

(c) When the proposed action is not a classified action, or when there is no overriding concern for national security associated with the proposed action.

(d) When a request for a hearing has been submitted by another agency with jurisdiction over the action and is supported by reasons why a hearing will be helpful.

(e) When a minority or low-income population may be disproportionately affected.

(2) Purpose. The purpose of public meetings on a proposed project is twofold. First, public meetings are intended to provide interested members of the public with relevant information. Second, public meeting affords members of the public an opportunity to present their views of the proposed action. The two foregoing objectives dictate the format for conducting public meetings, hearings, or open house. Reference (aa), distributed by CMC (LF), outlines the steps involved in preparing for public meetings and a suggested format for public meetings. Action proponents, in consultation with command or installation environmental staff, should tailor the format for each hearing as the circumstances dictate to meet the objectives of the public meeting. The objectives are to provide information to the public and to record the opinions of interested persons for later evaluation in conjunction with the proposed action.

## 12202. TERMS AND DEFINITIONS

1. Action. Broadly interpreted as any proposal initiated by the Marine Corps, including:

a. New activities or projects entirely or partly funded, assisted, conducted, regulated, or approved by the Marine Corps.

b. Substantive changes in continuing actions, such as major changes in operation tempo, areas of use, or in methodology/equipment, where these

changes have the potential for significant impact.

c. Specific projects, such as construction or management activities located in a defined geographic area (e.g., MILCON projects, public/private venture projects, special projects, land acquisition, natural resources management projects, and locally funded projects).

2. Action Proponent. The commander, commanding officer, or civilian director of a unit, activity, or organization who initiates a proposal for action, as defined in section 23, part 1508 of reference (e), and who has command and control authority over the action once it is authorized. For some actions, the Action Proponent will also serve as the decision-making authority for that action. In specific circumstances, the Action Proponent and decision maker may be identified in Navy regulations, other SECNAV Instructions, operational instructions and orders, acquisition instructions, and other sources which set out authority and responsibility within the DON. For Acquisition Program actions, the Acquisition Program Manager is the Action Proponent.

3. Administrative Record. The administrative record is a critical component of the NEPA process and consists of all documents and materials (including intra-office emails) directly or indirectly considered by the decision maker. Should a decision be challenged, a reviewing court will review the decision primarily (if not solely) based on the administrative record. The decision maker is responsible for assembling and maintaining the administrative record. To this end, commanders/supervisors/officers-in-charge must ensure that all administrative record documents and materials are properly maintained and readily retrievable upon request.

4. CATEX (section 4, part 1508 of reference (e)). Actions that the DON has determined do not have a significant effect, individually or cumulatively, on the human environment under normal circumstances and for which neither an EA nor an EIS is required. DON CATEXs are provided in section 6, paragraph f of reference (f).

5. Installation/Command EIRB. A selected group of subject matter experts appointed by the CG/CO of the installation or Command within which the proposed action will be implemented. The board reviews environmental documentation to determine if the potential for environmental degradation or public controversy exists and the recommended level of NEPA documentation. The composition of this EIRB will include a cross section of the command, and where appropriate, other Marine Corps commands/units and tenants. Members of the board should include the counsel or staff judge advocate; the heads of facilities, environment, and operations/training; the comptroller; public affairs; community plans and liaison office; and any others as determined by the installation or Command CG/CO. The EIRB will ensure that the documentation is in compliance with reference (a) or (b).

6. Cooperating Agency (section 5, part 1502 of reference (e)). Any Federal agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or any reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. A state or

local agency of similar qualifications or, when the effects are on a reservation, a Native American tribe may, by agreement with the lead agency, become a cooperating agency.

7. EA (section 9, part 1508 of reference (e)). An EA is a concise document that:

a. Briefly provides sufficient evidence and analysis for determining whether to prepare an EIS or FNSI.

b. Aids Marine Corps compliance with reference (a) when no EIS is necessary.

c. Facilitates preparation of an EIS when one is necessary (i.e., when the contemplated actions are considered to have a potential for significant environmental impact or environmental controversy, and therefore a FNSI is not appropriate).

d. Includes brief discussions of the need for the proposal, reasonable alternatives to the proposed action, environmental impacts of the proposed action, and a list of the agencies and persons consulted.

8. EIS (part 1502 of reference (e)). A NEPA document that provides full and fair discussion of potentially significant environmental impacts of major Federal actions and informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. It is used by Federal officials, in conjunction with other relevant materials, to plan actions and make decisions.

a. DEIS. A document normally prepared for actions potentially having a significant impact on the quality of the human environment or having potentially controversial environmental effects. DEISs are filed with the EPA and distributed to cognizant Federal, state, local, and private agencies, organizations, and individuals for review and comment before preparation of an FEIS.

b. FEIS. A completed statement, normally a separate and additional document from the DEIS, incorporating all pertinent comments and information provided during public and agency review of the DEIS. Responses to all substantive review comments will be contained in the FEIS. The FEIS is filed with the EPA.

c. Supplemental Environmental Impact Statement (SEIS) (section 9, part 1502 of reference (e)). A document evaluating changes to either a DEIS or an FEIS necessitated by substantial modifications to the proposed action or significant new circumstances or information that would result in different environmental impacts than those evaluated in the original document. An SEIS may be prepared at any time after the preparation and filing of a DEIS or FEIS; it is filed with the EPA and distributed to recipients of the DEIS and FEIS.

9. FNSI (section 13, part 1508 of reference (e)). A document in which the

Marine Corps briefly presents reasons why an action, not otherwise categorically excluded, will not have a significant effect on the human environment and for which an EIS will not be prepared. A FNSI may be one result of the review of an EA. Any mitigation measures required to reduce the impacts of the proposed action to less than significant must be recorded in the FNSI (e.g., mitigated FNSI).

10. HQEIRB. A selected group of subject matter experts established at the CMC (LF) to review and assess the content of submitted EISs and selected EAs.

11. Human Environment (section 14, part 1508 of reference (e)). The natural and physical environment and the relationship of people with that environment.

12. Impacts (sections 7 and 8, part 1508 of reference (e)). Impacts are synonymous with effects and include direct, indirect, and cumulative impacts.

a. Direct Effect. Effect caused by an action that occurs at the same time and place as the action.

b. Indirect Effect. Effect also caused by an action and which occurs later in time or farther removed in distance from the action. Indirect impacts include:

(1) Growth-inducing effects.

(2) Effects related to induced changes in the pattern of land use, population density, or growth rate.

(3) Related effects on the human environment, including the natural and physical environment.

c. Cumulative Effects (section 7, part 1502 of reference (e)). Impacts that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) undertakes such actions. Cumulative effects can result from individually minor but collectively significant actions taking place over time.

13. Lead Agency (section 16, part 1502 of reference (e)). The agency or agencies preparing or having taken primary responsibility for preparing an EIS.

14. Mitigation (section 20, part 1508 of reference (e)). Activities that would lessen or modify the adverse impacts associated with a proposed action. The Marine Corps further defines mitigation as those actions required under the terms of a permit or other requirement identified in the FNSI or ROD, not to include BMPs or standard Conservation Measures specified in the INRMP. Mitigation includes:

a. Avoiding the impact altogether by not taking a certain action or parts of an action; this mitigation measure is preferred.

b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

e. Compensating for the impact by replacing or providing substitute resources or environments. Tracking for implementation of mitigation measures is accomplished through an annual data call and through the ECE audit process.

15. Proposal (section 23, part 1508 of reference (e)). A "proposal" exists at that stage in the development of an action when the Action Proponent has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated. A proposal may exist in fact as well as by agency declaration that one exists.

16. Regional EIRB. A selected group of subject matter experts appointed by the CG of the Region (e.g., MCI East, MCI West, MCI Pacific). The board reviews environmental documentation to determine if the potential for environmental degradation or public controversy exists and the recommended level of NEPA documentation. The composition of this EIRB will include a cross section of the Regional command. Members of the board should include the counsel or staff judge advocate; the heads of facilities, environment, and operations/training; the comptroller; public affairs; community plans and liaison office; and any others as determined by the CG of the Region. The EIRB will ensure that the documentation is in compliance with reference (a) prior to forwarding it to CMC (LF) for review.

17. REIR. A standard form prescribed by the Installation Commander to document the need for environmental analysis and compliance with reference (a).

18. ROD. A concise public document providing a rationale for the alternative selected for implementation as presented in an FEIS. The document, as proposed by the activity/Action Proponent, will be finalized by the CMC (LF) on behalf of the HQEIRB and will state the decision, identify the alternatives considered (including those that were environmentally preferable), and discuss all factors, including non-environmental considerations, that influenced the decision. The ROD will commit the Action Proponent to the appropriate mitigation, if applicable, to minimize environmental harm, and to identify those measures that were considered, but not selected, for implementation. Additionally, any monitoring program associated with selected mitigation measures will be addressed.

19. Scope (section 7, part 1501 of reference (e)). "Scope" consists of the range of actions, alternatives, and impacts to be considered in an EA or an EIS. The scope of an individual EA or EIS may depend on its relationships to other EAs or EISs. To determine the scope of an EA or an EIS, Action Proponents must consider three types of actions, three types of alternatives,

and three types of impacts. They include:

a. Actions (other than unconnected single actions) that may be:

(1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are "connected" if they:

(a) Automatically trigger other actions that may require EISs.

(b) Cannot or will not proceed unless other actions are taken previously or simultaneously.

(c) Are interdependent parts of a larger action and depend on the larger action for their justification.

(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An Action Proponent may wish to analyze these actions in the same EA or EIS. It should do so when the best way to assess adequately the combined impacts of similar actions is to treat them in a single EA or EIS.

b. Alternatives, which include:

(1) No Action alternative.

(2) Other reasonable courses of action.

(3) Mitigation measures (not in the proposed action).

c. Impacts, which may be:

(1) Direct.

(2) Indirect.

(3) Cumulative.

20. Scoping (section 7, part 1501 of reference (e)). An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

21. Significantly (section 27, part 1508 of reference (e)). "Significantly" as used in NEPA requires consideration of both context and intensity:

a. Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national),

the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

b. Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

(2) The degree to which the proposed action affects public health or safety.

(3) Unique characteristics of the geographic area such as proximity to cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

(7) Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

(8) The degree to which the action may adversely affect districts, sites, landscapes, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under reference (h).

(10) Whether the action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment.

CHAPTER 12

ENVIRONMENTAL PLANNING AND REVIEW

SECTION 3: RESPONSIBILITIES

12300. CMC (LF)/COMMANDER MCICOM

1. Establish policy and procedures regarding compliance with references (a) and (b).
2. Coordinate the CMC (LF) review and disposition of EAs/Overseas EAs referred by the installation/Command CO/CG and EIS/Overseas EIS documents through the HQEIRB.
3. Coordinate as appropriate with the CEQ; EPA; Deputy Under Secretary of Defense for Environmental Security, ASN (EI&E); and Office of the Assistant Secretary of the Navy, Research, Development, and Acquisition regarding NEPA and reference (b) actions elevated to Headquarters level.
4. For EIS documents, coordinate with the Regional and Installation/Command EIRBs during preparation of a ROD. The proposed ROD will be drafted to reflect the HQEIRB review of the FEIS and will be forwarded to SECNAV by the CMC (LF) for signature and final disposition.
5. Assist commands with the interpretation of policies, implementation of procedures, and compliance with references (a) and (b) for Marine Corps actions.
6. Coordinate, as appropriate, with the director of public affairs, for releasing to the public environmental documents per reference (a) and other applicable Federal laws.
7. Publish NOIs, announcements of public meetings/public hearings, and RODs in the *Federal Register*.
8. Provide assistance for actions initiated by private persons, state or local agencies, and other non-DON/DOD entities for which DON involvement may be foreseen.
9. Provide support to Marine Corps Regions, Marine Corps installations, and Marine Corps commands/units and tenants by interpreting Federal, state, local, and overseas compliance requirements for references (a) and (b), and by uniformly applying Marine Corps policy as set forth in this Manual.
10. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
11. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to NEPA regulations.

12301. HQEIRB. Receive, review, and provide recommendations, as appropriate, to Deputy Chief of Staff, Installations and Logistics on NEPA

and reference (b) documents elevated to Headquarters level (e.g., NOIs, DEIS, EIS, ROD, and Overseas EAs and EISs).

12302. REGIONAL EIRB. Receive, review, and provide recommendations, as appropriate, to CG of Region (e.g., MCI East, MCI West, MCI Pacific) for approval on public notices, DEIS, FEIS, ROD, and those EA/FNSI documents to be elevated to Headquarters level, prior to forwarding documents to CMC (LF) for review and approval. It should be noted that for actions proposed directly by the Region, the Regional EIRB shall function as the initial EIRB for review of the action.

12303. CG/CO OF MARINE CORPS INSTALLATIONS, COMMARFORRES AND MARCORSYSCOM

1. Designate, chair, and provide for establishing an Installation/Command EIRB consisting of a cross section of command personnel, including both environmental and legal staff.
2. Designate an alternate, to whom responsibility for signing CATEX Decision memoranda may be delegated.
3. Promptly notify the CMC (LF) when a decision to prepare an EA that meets conditions in paragraph 12201.5.b, or a DEIS has been made.
4. Decide whether a FNSI is appropriate when the proposed action does not involve any of the circumstances listed at paragraph 12104.5, recommend preparation of a DEIS, or recommend that the action not proceed. The decision must be based on the Installation/Command EIRB's recommendation.
5. Ensure that adequate funding and personnel are available for environmental review and that appropriate orders include the requirements of planning and funding environmental documents.
6. Ensure that analyses are conducted for the environmental effects of current and proposed actions per DOD regulations, reference (e), and other applicable statutes and regulations. Ensure that all documents are reviewed by installation/Command legal counsel for legal sufficiency.
7. As appropriate under references (a) and (b), encourage public participation in environmental evaluations of projects or programs. To the extent practical, post environmental planning documents and decision documents on a public website.
8. Ensure that environmental analysis and the NEPA or reference (b) process are included at the initial planning stages and at each following procedural step or decision milestone in the development of a project or program.
9. Per NEPA analyses, per reference (p), ensure that all agency consultations and coordination, excluding permits (e.g., wetland or stormwater permits), are completed prior to signing FNSIs and prior to forwarding final EISs to CMC (LF).
10. Ensure that the administrative record supporting the NEPA or reference (b) process for the proposed action is assembled and maintained.

11. Identify and submit to the CMC (LF) project documentation and funding requests for NEPA/reference (b)-related actions that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required for compliance with NEPA/ reference (b) requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

12. Ensure that impacts to installation resources are mitigated, as specified in decision documents and as required per applicable environmental statutes, and that the effectiveness of mitigation measures is monitored.

13. Ensure that permit conditions and commitments are met.

12304. INSTALLATION/COMMAND EIRB

1. Ensure that all NEPA or reference (b) documents fully comply with all legal and procedural requirements through a review for technical sufficiency, including, but not limited to:

a. Complete analysis of alternatives and their associated impacts;

b. Appropriateness of alternatives analyzed; and

c. Appropriateness of proposal as required to coexist with other actions on the installation.

2. Ensure that all NEPA or reference (b) documents have undergone appropriate staff review.

3. Assist the Action Proponent in determining whether the proposed action requires the preparation of an EA or EIS.

4. Review completed EAs, and make recommendations to the installation/Command CO/CG for a FNSI, a DEIS, or no action. The EIRB will draft the proposed FNSI and forward both the EA and FNSI to the installation/Command CO/CG for signature.

5. If the EA meets one of the requirements discussed in paragraph 12104.5, the EIRB will forward, for the installation/Command CO/CG, the EA and proposed FNSI to the next level of EIRB (Regional EIRB or HQEIRB) for review and concurrence for approval. A letter from the installation/Command CO/CG stating the results of the installation/Command EIRB and certifying that the document(s) have been found legally sufficient by the installation/Command legal counsel shall be included with the documentation provided to the HQEIRB.

6. Draft NOI, DEIS, EIS, and ROD and, following the same procedures noted above for EAs, forward these documents to installation/Command CO/CG for approval. A letter from the installation/Command CO/CG stating the results of the installation/Command EIRB and certifying that the document(s) have been found legally sufficient by the installation/Command legal counsel shall

be included with the documentation provided to the HQEIRB.

7. Retain on file, for no less than 10 years, copies of all decision documents, completed EAs and EISs, published FNSI statements, RODs, and minutes taken during EIRB meetings.

8. The EIRB will include the installation/Command CG/CO or his/her designated representative, legal counsel, the heads of facilities, environment, operations/training, comptroller, public affairs, community plans and liaison departments, as appropriate, and any others as determined to have an interest in the proposed action by the installation/Command CO/CG.

12305. INSTALLATION/COMMAND ENVIRONMENTAL PLANNING STAFF

1. Assist the Action Proponent to effect references (a) and/or (b).
2. Provide specific installation/Command guidance related to references (a) or (b).
3. Review NEPA or reference (b) documents and provide technical assistance.
4. Natural resource program managers shall serve as the primary POC for all formal or informal consultation with the appropriate regulatory agencies when actions may impact natural resources (e.g. threatened or endangered species, critical habitat, wetlands).
5. Cultural resource program managers shall serve as the primary POC for all consultations with SHPOs, Native American tribes and NHOs when actions may impact cultural resources.
6. Negotiate (in coordination with action proponent) mitigation requirements with applicable regulatory agencies.
7. Monitor and track mitigation implementation and adjust as necessary to ensure success. Should there be a substantial failure of the mitigation, in either implementation or effectiveness, work with the action proponent and appropriate regulatory authority (if any) to implement appropriate remedies

12306. ACTION PROPONENTS

1. Provide funds for NEPA/reference (b) documentation and all related ancillary studies, mitigation, and monitoring costs. Provide funds for NEPA documentation and all related ancillary studies and mitigation costs. NEPA/reference (b) funding is not centrally managed; funds must come from action sponsors or from installation operation and maintenance O&M budgets. Action Proponent Sponsors and/or Action Proponents must program funds for NEPA/reference (b) compliance. Funds for mitigation measures should be identified as part of MILCON funding requests (separate line item of Form 1391). For non-MILCON projects, funds for mitigation must be programmed as part of the project funding request.
2. Coordinate with the installation/command environmental staff at the earliest possible opportunity to determine the level of NEPA documentation required. The installation/command environmental staff will consult with

counsel and/or the EIRB when the level of NEPA/reference (b) documentation may be subject to legal or other qualifying interpretations.

3. Sign a Decision Memorandum if required for an action that has been CATEX'd, with conditions to be met before, during, and following completion of the proposed action. The Action Proponents are to maintain the original documentation. Copies of the REIR and/or decision memorandum must be made available to the CMC (LF) upon request.

4. Coordinate with the installation/Command environmental staff and fund for the development of an EA or EIS, as appropriate for actions not identified on the list of CATEXs.

5. Coordinate with the installation/Command environmental staff and fund for the publication of the FNSI, NOI, or ROD, as appropriate, in local newspapers.

6. Ensure funds are available and programmed to fund implementation of mitigation commitment(s) and satisfy established success criteria. If funding is not available for mitigation specified in a FNSI, the action may not go forward until (1) funding is provided and mitigation is implemented; (2) the project design can be modified to minimize or avoid the anticipated impact; or (3) an EIS is prepared to document that a significant impact will occur due to lack of funding for mitigation.

7. The Action Proponent is responsible for ensuring that all mitigation measures identified in the FNSI or ROD are implemented in a timely fashion, and should work with the installation environmental planning staff to monitor the effectiveness of mitigation measures and adaptively manage mitigation if monitoring shows measures to be ineffective.

REFERENCES

- (a) 42 U.S.C. 4321-4347
- (b) Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions," January 4, 1979
- (c) DOD Directive 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," March 31, 1979
- (d) 32 CFR 187
- (e) 40 CFR 1500-1508
- (f) 32 CFR 775
- (g) 42 U.S.C. 9601-9675
- (h) 16 U.S.C. 1531-1544
- (i) 16 U.S.C. 470-470w-6
- (j) SECNAV M-5214.1
- (k) 42 U.S.C. 7401-7671
- (l) SECNAV M-5210.1
- (m) FAA Order JO 7400.2G "Procedures for Handling Airspace Matters"; Appendix 7. FAA/DOD Memorandum of Understanding Concerning Environmental Review of Special Use Airspace Actions
- (n) 42 U.S.C. 300f-300j-26
- (o) 7 U.S.C. 4208(b)
- (p) SECNAV Policy, "Supplemental Policy Guidance to SECNAVINST 5090.6A for Consultations and Regulatory Coordination," May 6, 2009.
- (q) Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 16, 1994
- (r) DOD Strategy on Environmental Justice, March 24, 1995
- (s) 16 U.S.C. 470aa-470mm
- (t) 16 U.S.C. 1451-1465
- (u) 33 U.S.C. 1251-1387
- (v) SECNAVINST 5000.2D
- (w) Department of Defense Instruction 5000.02, "Operation of the Defense Acquisition System," December 8, 2008.

(x) FAA Order 1050.1 "Policies and Procedures for Considering Environmental Impacts"

(y) MCO 3570.1 "Range Safety"

(z) MCO 3550.10 "Policies and Procedures for Range and Training Area (RTA) Management"

(aa) HQMC NEPA Manual

(ab) 42 U.S.C. 13101-13109

CHAPTER 13

NOISE MANAGEMENT

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CHAPTER 13

NOISE MANAGEMENT

SECTION 1: INTRODUCTION

13100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for reducing environmental noise at Marine Corps installations. Workplace noise as an occupational health and safety issue is not addressed in this Manual.

13101. APPLICABILITY

1. See paragraph 1101 regarding applicability of Federal, state, and local laws, regulations, and ordinances to USMC active and reserve installations and activities.

2. This chapter also applies to overseas installations.

13102. BACKGROUND

1. Reference (a) seeks to protect Americans from "noise that jeopardizes their health or welfare." This Act directs Federal agencies to further this policy within their programs.

2. Marine Corps operations have the potential to cause adverse noise impacts on surrounding communities. State, local, and host nation laws may also prescribe maximum noise levels to control these impacts.

13103. FEDERAL STATUTES AND E.O.s.

1. The Noise Control Act of 1972 (42 U.S.C. 4901 et seq.). The act requires that Federal performance standards be incorporated into the design of certain new vehicles, railroad equipment, and products in order to reduce noise emissions. The Noise Control Act does not prescribe retrofit modifications for existing noise sources. Military aircraft, combat equipment, and weapon systems are exempt from new product design standards. The Act provides only for the prescription and amendment of standards for nonmilitary aircraft noise and sonic boom.

2. E.O. 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978. E.O. 12088 directs Federal facilities to comply with all requirements applicable to environmental noise management. Federal facilities must also comply with boundary noise limits established by state and local laws subject to specific exemption.

13104. REQUIREMENTS

1. Air Installations Compatible Use Zone (AICUZ) Program. The AICUZ program was established by reference (b) and codified in reference (c). To work with local communities in fostering compatible land use development in the vicinity of military installations, this program identifies and addresses incompatible developments in areas adjacent to air installations and subject

to rated levels of aircraft noise and potential accident impacts. Its objectives are to assess the impact of aircraft operations with regard to aircraft noise sources and accident potential produced by existing and proposed actions both on and off-base, to ensure local land use development is compatible with the installation's mission, to minimize noise impacts whenever practicable through implementation of operational alternatives that do not degrade mission requirements or aircraft safety, and to identify and address incompatible development in areas that are in the vicinity of air installations. According to reference (d), the AICUZ for each military air installation shall consist of land areas upon which certain uses may obstruct the airspace or otherwise be hazardous to aircraft operations and land areas that are exposed to the health, safety or welfare hazards of aircraft operations.

## 2. Range Air Installations Compatible Use Zone (RAICUZ) Program.

The RAICUZ program is similar to the AICUZ Program, but is designed specifically for air-to-ground ranges. According to reference (e), the RAICUZ program is designed to protect public health, safety, and welfare and to prevent encroachment from degrading the cooperational capabilities of air-to-ground ranges. The program includes range safety and noise analyses, and provides land use recommendations compatible with Range Compatibility Zones (RCZs) and noise levels associated with the military range operations. Its objectives are to preclude public exposure to hazards and noise associated with air-to-ground ranges; protect Navy and Marine Corps investment by safeguarding the current and potential operational capabilities of those ranges; promote compatible land uses near air-to-ground ranges; inform the public about the RAICUZ program and seek cooperative efforts to minimize potential safety and noise impacts in the vicinity of the air-to ground ranges; and establish working relationships between the installation and appropriate public, government, and tribal organizations. Each Navy and Marine Corps air-to-ground range shall have a RAICUZ study including a detailed analysis of current and future range utilization, special use airspace, range compatibility use zones, aircraft noise, ordnance noise, and land use compatibility. The RAICUZ study includes a compatible land use plan with associated RCZs specifically tailored for each range, and should consider potential noise impacts in the vicinity of the range, including development of noise exposure contours that reflect site specific conditions and activities.

## 3. State and Local Requirements

### a. State and Local Laws

(1) State and local regulations on environmental noise vary too widely for any generic use in determining compliance for a specific operation at a specific site. As a general rule, states tend to treat environmental noise as source-specific, the emissions from which will be controlled depending on the community area specifically affected. State and local laws may prescribe maximum noise levels across property lines. These boundary noise limits are attainable by a variety of structural and natural noise path barriers and by source design modifications.

(2) The following Marine Corps installations and activities may be

subject to state and local regulations and may require studies to determine the impact of environmental noise on the surrounding communities:

- (a) Airfields.
- (b) Weapon, rocket, and missile-firing ranges.
- (c) Test tracks for vehicles.
- (d) Outdoor power-generating equipment.
- (e) Demolition and explosive disposal sites.
- (f) Vehicle operations.

b. Even in the absence of state and/or local environmental noise regulations, the Marine Corps must be aware of adverse noise impacts in the surrounding community. The Marine Corps can minimize adverse public response to its programs by initiating a coordinated cooperative approach with the community and by emphasizing mutual problem-solving with state and local government authorities and community organizations.

c. A review of complaints from residents of surrounding communities can help to determine the degree and extent to which the surrounding community perceives the Marine Corps as responsible for an adverse environmental noise impact. The Public Affairs Office and the Community Planning and Liaison Office can be especially helpful in handling complaints and in advising the community of actions being taken to minimize environmental noise impacts.

d. Compliance with state and local requirements is generally interpreted to mean that the Marine Corps will comply with the procedural as well as the substantive aspects of environmental noise legislation. Obtaining permits for regulated functions would be an example of procedural compliance.

4. Environmental Compliance. See chapter 4 of this Manual for information on Marine Corps policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, and regional statutory and regulatory environmental requirements. The chapter establishes Marine Corps policy and responsibilities for the ECE Program implementation. The ECE Program is the checking and preventive or corrective action component of the Marine Corps EMS.

#### 13105. TERMS AND DEFINITIONS

1. AICUZ Program. The AICUZ Program recognizes that some air installation operations are incompatible with certain possible uses of the land in the vicinity of the installation. The AICUZ program seeks to restrict the use of such land to compatible uses through such means as local zoning, state legislation, acquisition of restrictive easements, and acquisition of fee titles by the Federal Government.

2. Environmental Noise. The intensity, duration, and character of sounds from all sources.

3. Low-Noise Emission Product. Any product that emits noise in amounts significantly below the levels specified in noise emission standards applicable to that type of product under reference (a) at the time of procurement.

4. RAICUZ Program. The RAICUZ program is designed to achieve compatibility between air-to-ground ranges, existing and proposed land use, and airspace in the vicinity of the range installation. The program includes range safety and noise analyses, and provides land use recommendations compatible with RCZs and noise levels associated with the military range operations.

5. RCZs. RCZs define areas based on a level of protection to public health, safety, and welfare and recommend compatible land uses to prevent encroachment from degrading the operational capability of air-to-ground ranges. RCZs are divided into three zones: RCZ-I defines the area of greatest potential safety hazard and designates the minimum range surface area needed to contain all ordnance delivered at air-to-ground ranges; RCZ-II defines the area of armed over flight; RCZ-III defines the area under the restricted airspace used by aircraft for tactical maneuvering over the range.

CHAPTER 13

NOISE MANAGEMENT

SECTION 2: MARINE CORPS POLICY

13200. GENERAL

1. Unless specifically exempted, Marine Corps commands engaged in any activity resulting in noise emissions must comply with Federal, state, interstate, and local requirements for the control and management of environmental noise.

2. The Marine Corps noise control and management programs must:

a. Coordinate with other Federal agencies to maintain active programs to protect the health and welfare of both on-base and off-base personnel from hazardous noise levels.

b. Procure, whenever feasible, low-noise emission products. Emphasize a "buy quiet" approach in procurement actions.

c. Soundproof, wherever feasible, Marine Corps-owned or -operated housing, hospitals, schools, and child development center buildings affected by noise from military operations.

d. Locate noise-sensitive housing, child development centers, and other developments away from major noise sources.

e. Coordinate with local, state, and regional governments and local community groups to identify and address local noise problems.

f. Consider noise problems when planning, acquiring, and siting noise-generating equipment such as engine test stands. Give full attention to all available alleviating measures, such as remote siting and sound suppression equipment. Consider allocating aviation buffer zones to wildlife refuges or agricultural outleasements to preclude encroachment of the civilian community. Consider creation of noise buffer zones by purchase of easements on private lands adjoining ranges and air space.

g. Notify the public to the extent feasible of any significant increases in noise generation or in deviations from normal noise generation patterns. Also, where the generation of significant noise routinely affects the civil community, institute a program of community education to develop positive public relations.

h. Minimize disruption to the local community regarding operations that are known to generate complaints. These activities should still be consistent with military requirements and the efficiency of operations, but they should be conducted at such times, locations, and under such conditions as to minimize the disruption to the local community.

13201. WORKPLACE NOISE. Workplace noise is not considered an environmental noise in this Manual. Guidance for occupational noise is provided in reference (f).

13202. AVIATION NOISE SUPPRESSION

1. Marine Corps installations must consider ameliorating options such as remote siting, sound suppression equipment, and sound barriers when developing new aircraft-related systems such as engine test stands.
2. Marine Corps installations must consider suitably quiet, ground support equipment (e.g., starters, hush houses) when procuring new aircraft systems.

13203. RESTRICTING NOISY OPERATIONS. To the maximum extent practicable, personnel must limit to normal working hours the use of power tools, machinery, construction equipment, and other noisy devices.

13204. TRAINING

1. Marine Corps personnel engaged in processes that result in environmental noise must receive training on noise pollution reduction.
2. NAVFAC and Installation base development, environmental engineers, and environmental planners must receive training on noise P2 programs.

CHAPTER 13

NOISE MANAGEMENT

SECTION 3: RESPONSIBILITIES

13300. CMC (LF)/COMMANDER MCICOM

1. Identify research requirements to define and study noise pollution problems unique to the Marine Corps and coordinate such research with other Marine Corps facilities and DOD components (e.g., the Defense Noise Working Group), and with the FAA, EPA, and other Federal agencies as appropriate.
2. Ensure that ground equipment associated with procurement of new and/or follow up aircraft contain necessary noise suppressers.
3. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by interpreting Federal, state, local, and overseas noise management requirements and by uniformly applying Marine Corps policy as set forth in this Manual. Provide funding support as needed to Bases and Stations to ensure installations can perform studies as necessary to update their AICUZ and RAICUZ Programs.
4. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
5. Conduct special environmental compliance and protection studies with regard to noise management to assist in establishing policy or initiating actions.
6. Ensure, through field visits and the ECE Program (see chapter 4 of this Manual), Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to noise management.
7. Track Marine Corps progress toward meeting established noise management goals.

13301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Establish a base or station order implementing the specifications set forth in this chapter.
2. Initiate procurement procedures to ensure that products and equipment not designed for combat use meet Federal or host nation noise standards.
3. Implement procedures for limiting on-base noise generating operations and for complying with property-line noise levels consistent with applicable state and local laws or host nation standards.
4. Ensure that coordination occurs as appropriate with the safety office in matters relating to environmental noise exposure.
5. Identify and submit to the CMC (LF) project documentation and funding

requests for noise pollution management that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with environmental noise management requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed in evaluating and selecting projects that address compliance requirements.

6. Periodically verify and record that environmental noise levels are consistent with any Marine Corps noise control and abatement programs.

REFERENCES

(a) 42 U.S.C. 4901 et seq.

(b) OPNAVINST 11010.36C

(c) 32 CFR 256

(d) DOD Instruction 4165.57, "Air Installations Compatible Use Zones,"  
November 8, 1977

(e) OPNAVINST 3550.1A

(f) MCO 6260.1

CHAPTER 14

PESTICIDE POLLUTION PREVENTION

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CHAPTER 14

PESTICIDE POLLUTION PREVENTION

SECTION 1: INTRODUCTION

14100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for complying with the legal use of pesticides at Marine Corps installations in accordance with the DOD pest management specifications outlined in references (a) and (b).

14101. APPLICABILITY. See paragraph 1101.

14102. BACKGROUND

1. This instruction applies to all Navy and Marine Corps commands afloat and ashore. These include GOCO installations; base operating services; Navy Morale, Welfare, and Recreation and Marine Corps Community Services functions including golf courses; land management operations including agricultural out leases; PPV housing and other privatized operations on naval property; and non-naval property under Navy and Marine Corps stewardship where pest control operations are conducted.

2. The DOD pest management specifications described in enclosure 4 of reference (a) prescribes detailed procedures for the DOD pest management program. Procedures prescribed under the instruction are based on IPM concepts. IPM is required for DOD pest management and disease vector control. IPM is a sustainable approach to managing pests and controlling disease vectors by combining applicable pest management tools in a way that minimizes economic, health, and environmental risks. IPM uses regular or scheduled monitoring to determine if and when treatments are needed and employs physical, mechanical, cultural, biological, genetic, regulatory, chemical, and educational methods to keep pest numbers low enough to prevent unacceptable damage or impacts. Treatments are not made according to a predetermined schedule; they are made only when and where monitoring has indicated that the pest will cause unacceptable economic, medical, or aesthetic damage. Treatments are chosen and timed to be most effective and least disruptive to the natural control of pests. Least hazardous, but effective, pesticides are used judiciously when necessary.

3. Relationship of Pesticide P2 to other Environmental Program Areas

a. For Marine Corps policy on water quality management (WQM), see chapter 20 of this Manual.

b. For Marine Corps policy on P2, see chapter 15 of this Manual.

c. For Marine Corps policy on natural resources conservation, see chapter 11 of this Manual.

d. For Marine Corps policy on HW management, see chapter 9 of this Manual.

e. For Marine Corps policy on emergency planning and response, see chapter 7 of this Manual.

4. Additionally, the Marine Corps must integrate environmental compliance for pesticides with occupational health and safety policies and regulations.

14103. FEDERAL STATUTES

1. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1947, as Amended (7 U.S.C. 136 et seq.). FIFRA provides the principal means for preventing adverse effects on the environment from pesticides through product registration and applicator certification. The EPA's registration of all pesticide products results in label instructions on each container for use, storage, and disposal. Label instructions are legally applicable to all users. Under FIFRA, the EPA must accept certain recalled pesticides for safe disposal. It is illegal to purchase, distribute, or use any pesticide in the CONUS or OCONUS subject to FIFRA jurisdiction that does not have an EPA registration number or for which registration has been canceled or suspended. It is also illegal to apply, store, or dispose of any pesticide or pesticide container in any manner inconsistent with applicable regulations. All pesticides must be applied by appropriately certified personnel except when used for personal relief (defined in paragraph 14105.14). Under FIFRA:

a. The pesticide label, regulated by EPA, establishes directions for use, precautions for preventing adverse environmental effects, and disposal requirements. Failure to adhere to the labeling requirements or using the substance in a manner inconsistent with the product label is a violation of Federal law.

b. EPA approves Federal and state agency plans for training and certification of pesticide applicators.

c. Records of all pesticide applications must be retained per reference (c), SSIC 5090.4; such records must be available for inspection by state or EPA representatives.

2. RCRA of 1976, as Amended (42 U.S.C. 6901 et seq.). RCRA outlines the HW Management requirements for the disposing of excess or waste pesticides and for equipment and containers contaminated by pesticides. RCRA regulations identify the criteria, standards, and requirements for proper disposal of excess pesticides, pesticide containers, and the waste resulting from the cleanup of pesticide spills (see chapter 9 of this Manual).

3. FWPCA of 1972, as Amended by the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.). This Act provides for protection of surface waters from contamination by pesticides in wastewater and runoff. Control is exercised through stringent effluent limitations imposed through the NPDES permitting program and the Storm Water Program (see chapter 20 of this Manual).

4. EPCRA of 1986 (42 U.S.C. 11001 et seq.). EPCRA provides for protecting and notifying communities in the event of a release of a toxic chemical. The list of toxic chemicals requiring notification includes several pesticides. The Marine Corps must comply with specific provisions of EPCRA (found in

sections 301-313) as required by E.O. 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007, and implementing instructions (see chapter 7 of this Manual).

5. TSCA of 1976 (15 U.S.C. 2601 et seq.). This Act requires the EPA to regulate and control harmful chemical and toxic substances in commercial use. Congress enacted TSCA to reduce unreasonable risks from chemicals to human health and the environment. Section 6 of TSCA authorizes the EPA to regulate hazardous chemical substances and mixtures.

6. ESA of 1973 (16 U.S.C. 1531 et seq.). The ESA provides for protecting threatened and endangered species of fish, wildlife, and plants, and their habitats. The Act requires Federal agencies to ensure that no agency action is likely to jeopardize the continued existence of Endangered and Threatened Species. Under ESA, the EPA is required to ensure that pesticide use is not likely to jeopardize endangered species or to adversely affect critical habitats. Endangered species and critical habitat protection is implemented through the pesticide labeling process and the issuance of state specific bulletins.

7. MBTA of 1918, as Amended (16 U.S.C. 703 et seq.). This Act protects migratory birds and their nests and eggs from being hunted, captured, purchased, or traded. The Act requires a USFWS permit be obtained before any action that would lead to direct death of migratory birds, including the use of pesticides to manage bird populations other than starlings, English house finches (house sparrows), and pigeons.

8. Federal Noxious Weed Act of 1974 (7 U.S.C. 2814). This Act prescribes integrated management systems to control or contain non-indigenous weeds that injure or have the potential to injure the interests of agriculture and commerce, wildlife resources, or the public health.

9. NEPA of 1969 (42 U.S.C. 4321 et seq.). NEPA specifies requirements for the aerial application of pesticides, as well as the filing of EISs on pesticide decisions.

10. CERCLA of 1980 (42 U.S.C. 9601 et seq.). CERCLA authorizes Federal action to respond to the release, or substantial threat of release, into the environment of HS, pollutants, or contaminants that may present an imminent and substantial danger to public health or welfare. Section 107(i) exempts application of pesticide products registered under FIFRA from CERCLA requirements.

11. FFCA of 1992 (Public Law 102-386). FFCA waives immunity for Federal facilities under solid and hazardous waste laws, CERCLA, and RCRA by allowing states to fine and penalize them for violations. This is applicable only to pesticides that are HWs, or are managed or disposed of as HWs requiring management under RCRA. See chapter 9 of this Manual.

12. Food Quality Protection Act of 1996 (Public Law 104-170). The Act amends FIFRA and the Food, Drug and Cosmetic Act. The Food Quality Protection Act contains language directly applicable to the DOD Pest Management Program by defining "maintenance applicator" and establishing a

requirement for minimum training, defining vector and public health pesticide, defining the term IPM, and promoting IPM through procurement and regulatory policies.

13. Occupational Safety and Health Act of 1970 (29 U.S.C 651 et seq.). This Act establishes safety and health standards to ensure that every worker (including pesticide applicators) in the Nation enjoys safe and healthful working conditions. The Occupational Safety and Health Act is made applicable to Federal facilities through E.O. 12196, "Occupational Safety and Health Programs for Federal Employees," February 26, 1980, and E.O. 13446, "Continuance of Certain Federal Advisory Committees and Amendments to and Revocation of Other Executive Orders," September 28, 2007.

14. E.O. 13514, "Federal Leadership in Environmental, Energy and Economic Performance," October 8, 2009. Subsection 2(b) requires Federal agencies to "ensure that pest management programs achieve, maintain, and monitor compliance with all applicable E.O.s and applicable Federal, state, and local statutory and regulatory requirements."

#### 14104. REQUIREMENTS

1. DOD Pest Management Program. See enclosure 4 of reference (a) for complete information on specific DOD requirements. Installations shall:

a. Develop, maintain, annually review, and revise their Integrated Pest Management Plan (IPMPs) at a minimum of every 5 years consistent with the program elements in enclosure 4 of reference (a) and with reference (d) (see Technical Guidance definition in paragraph 14105.29).

b. Implement pest management programs approved by NAVFAC Pest Management Consultants (PMCs) and performed by certified pesticide applicators in accordance with the IPMP written for each installation.

c. Establish pest management self-help programs for military housing and non-military housing programs when cost-effective and when IPM monitoring indicates a need for a self-help program.

d. Have all pesticide applications on Marine Corps installations be performed only by properly trained and certified personnel in accordance with reference (e), authorized by reference (a) or by state-certified applicators.

e. Use pesticides in CONUS in accordance with applicable laws, including reference (f), and OCONUS consistent with applicable laws, international agreements, Status of Force Agreements, FGS issued for the host nations, or where no such FGS have been issued, the criteria in reference (g).

f. Use only pesticides that have been approved by a NAVFAC PMC. Consideration should be given to locally purchased pesticides to ensure conformance with state management plans for groundwater protection and to facilitate use of recyclable pesticide containers when appropriate pesticides are not available in the Federal supply system.

g. Maintain complete daily pesticide application and pest management

operations records as required by section 136i-1 of reference (f). Maintain daily records of pesticides applied outside to PPV housing. Retain these records per reference (c), SSIC 5090.4 All pest management operations shall be reported using the NAVFAC Professional PMC approved/provided Online Pesticide Reporting System or the Pest Management Record Spreadsheet to provide an electronic copy of the data. The website for the NAVFAC Online Pesticide Reporting System is:

<https://clients.emailc.com/PestManagementNET/PesticideLogon.aspx>. The regional NAVFAC Professional PMC should be contacted to obtain a password and instructions to use the system. A copy of the Pest Management Record Spreadsheet can be found at

<http://www.afpmb.org/pubs/pesticideuse/pesticide.htm>. The report shall include individual daily records of all pest control operations, both chemical and non-chemical, including surveys. Records should be electronically submitted on a monthly basis through the NAVFAC Online Pesticide Reporting System or the Pest Management Record Spreadsheet (Microsoft Excel, 1997 or later version) via CD, e-mail attachment, etc.

h. Use pest management contracts when more cost-effective than in-house services. Ensure that firms and their employees, performing contract pest management work on Marine Corps installations and in support of Marine Corps operations overseas, comply with all certification, licensing, and registration requirements of the state or country where the work is performed. Ensure that the technical portions of contracts involving pest management reflect IPM methodology and are reviewed and approved by a NAVFAC PMC before solicitation.

i. Have Pest Management Performance Assessment Representatives (PMPARs) who have been trained in pest management at DOD-sponsored courses inspect pest management operations and pesticide applications performed by contractors.

j. Report pest management operations and pesticide applications performed by contractors as required in paragraph 14104.1g.

k. Monthly pesticide use reports shall be provided to the appropriate NAVFAC Applied Biology Office following the guidelines provided in reference (b).

2. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s), and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

#### 14105. TERMS AND DEFINITIONS

1. Applied Biology Program. A network of NAVFAC PMCs in the Environmental Business Line that assist Navy and Marine Corps installations with reference (f) and FGS-based compliance and provide IPM solutions that protect operations, war-fighters, quality of life, property, material and the environment from the adverse effects of living organisms.

2. Certifying Officials. Professional DOD pest management personnel who are

designated in writing by the Service Components to the Executive Director, Armed Forces Pest Management Board (AFPMB), who review and certify that qualifications of DOD applicators meet the DOD standards in reference (e), authorized by reference (a).

3. Component Senior PMC. The professional NAVFAC pest management individual designated in writing by the Service Components to the Executive Director, AFPMB, who is the primary POC for the Component's pest management program, including technical guidance, management oversight, and information requirements.

4. Direct Supervision. Supervision that includes being at the specific location where pest management work is conducted, providing instruction and control, and maintaining a line-of-sight view of the work performed. Certain circumstances may temporarily remove the line-of-sight view of the application of pesticide from the supervisor such as topographic constraints, vegetation constraints, or building structural constraints. Under these temporary circumstances, the supervisor must be responsible for the actions of the pesticide applicators. (see paragraph 14105.16e).

5. Disease Vector. Any animal capable of transmitting the causative agent of a human disease; serving as an intermediate or reservoir host of a pathogenic organism; or producing human discomfort or injury, including (but not limited to) mosquitoes, flies, ticks, mites, other insects, snails, and rodents. It is recognized that certain disease vectors are predominately economic pests that as conditions change may require management or control as a disease vector.

6. Disinsection. The procedure of killing or removing insects from ships or aircraft to prevent their importation into another port or country.

7. Installation IPM Coordinator. The individual officially designated by the installation commander to coordinate and oversee the installation pest management program and installation IPM plan. IPM coordinators must be certified as pesticide applicators if their job responsibilities require them to apply or supervise the use of pesticides.

8. IPMP. A long-range, comprehensive installation planning and operational document that establishes the strategy and methods for conducting a safe, effective, and environmentally sound IPM program. Written IPMPs are required as a means of establishing and implementing an installation pest management program.

9. IPM. A planned program, incorporating continuous monitoring, education, recordkeeping, and communication to prevent pests and disease vectors from causing unacceptable damage to operations, people, property, materiel, or the environment. IPM uses targeted, sustainable (effective, economical, and environmentally sound) methods, including education, habitat modification, biological control, genetic control, cultural control, mechanical control, physical control, regulatory control, and where necessary, the judicious use of least-hazardous pesticides.

10. MSDS. A document (OSHA form 174, or equivalent) that accompanies a

pesticide product, providing the handler with chemical information on ingredients, handling instructions, potential hazards, and manufacturer address and emergency contact information.

11. Monitoring. Thorough inspections or surveys conducted on a regular basis to determine the presence and prevalence of pests or disease vectors.

12. Nuisance Pests. Insects, other arthropods, and other organisms that do not cause economic damage or adversely affect human health, but which cause minor annoyance on occasion.

13. Onsite Supervision. Supervision that includes being physically located on the installation, but not necessarily at the specific work site, during the work performance and able to be contacted and to be present at the work site within 30 minutes.

14. PMPAR (Formerly known as Pest Control Quality Assurance Evaluators). Installation personnel trained in contract performance inspection or quality assurance and pest management at a DoD-sponsored course, whose duties include surveillance of commercial pest management services to ensure performance complies with contract specifications and legal requirements.

15. Personal Relief. Pest management control efforts made by Marine Corps personnel or their family members at their own expense for the control of pests in accordance with DOD and Marine Corps pest management policy.

16. Pesticide. Any substance or mixture of substances, including biological control agents, that may prevent, destroy, repel, or mitigate pests and are specifically labeled for use by the EPA. Also, any substance or mixture of substances used as a plant regulator, defoliant, desiccant, disinfectant, or biocide. (See paragraph 14105.26). Note: The AFPMB does not review or approve disinfectants or biocides.

17. Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides by others.

a. Certified Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides and who has been authorized to do so by successfully completing a training program approved by the EPA, followed by formal certification by the DOD or a state. OCONUS, the DOD provisions described in subsection 2.5 of reference (a) apply to individuals who apply pesticides or supervise the use of pesticides.

b. DOD-Certified Pesticide Applicators. DOD military or civilian personnel certified in accordance with reference (e), authorized by reference (a).

c. State-Certified Pesticide Applicators. Persons certified in accordance with reference (f) by a state with an EPA-approved certification plan.

d. Uncertified Installation Pesticide Applicators. Marine Corps employees who are not certified under the DOD or state plan during an

apprenticeship period not exceeding two years and who must apply pesticides under the direct supervision of a DOD-certified applicator.

18. Pesticide Cancellation. An action by the EPA that may limit the use of a pesticide. The EPA often issues instructions with the pesticide cancellations providing information on the proper disposition of PMC cancelled pesticides.

19. Pesticide Facility. The building and areas designated for handling and storing pesticides.

20. Pest Management. The prevention and control of disease vectors and pests that may adversely affect the Marine Corps mission or military operations; human health and well-being; or structures, materiel, or property.

21. Pest Management Materiel. Equipment or pesticides used to monitor, prevent, or control pests and disease vectors. Equipment items include, but are not limited to, all pesticide dispersal equipment, traps, nets, and pest-attracting or pest-repelling devices.

22. Pests. Arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds, and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

23. PMC. A professional, with a degree in a biological science, who has rigorous college-level entomology training, such as a NAVFAC civilian entomologist (applied biologist) or Bureau of Medicine and Surgery commissioned medical entomologist who has command program oversight responsibilities and provides guidance and information on the management of pest management programs for commands and installations.

24. Professional Pest Management Personnel. DOD military officers commissioned in the Medical Service or Biomedical Sciences Corps or DOD civilian personnel with college degrees in biological or agricultural sciences who are in a current assignment that includes pest management responsibilities exercised regularly. DOD civilian employees also must meet Office of Personnel Management qualification standards. Based on assignment, some professional pest management personnel are PMCs.

25. Registered Pesticide. A pesticide registered by the EPA for sale and use within the United States.

26. Restricted-Use Pesticide. A pesticide that the Administrator of the EPA (in accordance with reference (f)) or a state regulatory agency determines to have the potential to cause unreasonable and adverse effects on the environment or human health when applied in accordance with its directions for use and therefore requires additional regulatory restrictions.

27. Surveillance. Thorough inspections or surveys made before or after pest

management treatments to determine the presence and prevalence of pests or disease vectors.

28. Technical Guidance. Guidance prepared by the AFPMB on specific pest management and disease vector control topics. Technical guidance is available from the AFPMB, Defense Pest Management Information Analysis Center, [www.afpmb.org](http://www.afpmb.org).

CHAPTER 14

PESTICIDE POLLUTION PREVENTION

SECTION 2: MARINE CORPS POLICY

14200. GENERAL. Marine Corps policy is to comply with the DOD requirements set forth in reference (a) and to employ an IPM program that minimizes pesticide use and that ensures the protection of human health and the environment where pesticide use is necessary. The policy and guidance in reference (b) are incorporated by reference.

1. Establish and maintain safe, effective, and environmentally sound IPM programs to prevent or control pests and disease vectors that may adversely impact readiness or military operations by affecting the health of personnel or by damaging structures, materiel, or property.
2. Ensure that pest management programs achieve, maintain, and monitor compliance with all applicable E.O.s and applicable Federal, state, and local statutory and regulatory requirements.
3. Incorporate sustainable IPM philosophy, strategies, and techniques into all vector control and pest management planning, training, and operations, including installation IPMPs and other written guidance to reduce pesticide risk and prevent pollution.

14201. IPM PROGRAM

1. IPM must be based on seven steps that are routine procedures for addressing each pest problem:
  - a. Identify and assess pest or disease vector problems.
  - b. Develop a written management plan or strategy that emphasizes natural controls and nonchemical methods to deal with pest and disease vector problems.
  - c. Establish an action threshold for each pest and disease vector problem to define when corrective action must be implemented.
  - d. Use a monitoring procedure, such as inspection, trapping, or surveillance, for each pest and disease vector.
  - e. Apply corrective action when a threshold is reached for any pest or disease vector.
  - f. Use a documentation system to catalogue monitoring information and to document management problems.
  - g. Verify and evaluate procedures to ensure that the IPM program is meeting stated risk reduction measures and that information exists to redesign the IPM plan where required.

2. The written IPM plan or strategy must be a comprehensive document as outlined in reference (a).

14202. INSTALLATION IPMPS. Each installation shall have an IPMP as described in reference (a). The IPMP must list all program objectives, arranged in order of priority, according to potential or actual impact on health, morale, structures, materiel, or property. Installations that have more than 0.5 productive work-years of pest management work must have their own IPMP. Installations with less than 0.5 productive work-years must have an individual IPMP, or be included in a supporting installation's IPMP. The designated installation IPM Coordinator shall oversee the IPMP. IPMPs must be retained per reference (c), SSIC 5090.4. For more information on IPMPs, see appendix N.

14203. INSTALLATION CONSULTATIVE SUPPORT, PROGRAM REVIEWS, AND AUDITS

1. Command Program Reviews. To ensure adequate oversight of Marine Corps Pest Management Programs, NAVFAC PMCs will conduct onsite reviews of installation pest management programs at least every 36 months, with the following exceptions:

a. Installations requiring less than 0.5 work-years of pest management services must be reviewed at the discretion of the cognizant NAVFAC PMC.

b. Onsite review requirements can be met by formal program reviews and/or assistance visits.

2. Installations must notify the appropriate NAVFAC PMC whenever Federal, state, or local regulators ask to inspect pest management operations.

14204. TRAINING AND CERTIFICATION OF PEST MANAGEMENT PERSONNEL. For requirements relating to the training and certification of pest management personnel, see appendix O.

14205. PESTICIDES AND PEST MANAGEMENT EQUIPMENT

1. Procurement

a. The AFPMB must approve all introduction, inventory, and deletion of pest management materiel managed by the DLA for use in DOD programs. See reference (a) for procedural information on the acquiring of pest management equipment and pesticides.

b. Marine Corps installations must not procure or acquire pest management materiel that has not been recommended by the AFPMB or approved by the cognizant NAVFAC PMC. NSNs cannot be assigned to pest management materiel that has not been approved by the AFPMB.

2. Pesticide Labeling. Marine Corps installations must ensure that EPA-approved labels are on all pesticide containers and service containers used to store pesticides. If required, items such as Supply Department labels must be placed so as not to obscure the pesticide label. Copies of pesticide labels must be maintained at a central location and made available to

interested departments (e.g., Fire, Safety). A copy of MSDS and pesticide label(s) for every pesticide product in the inventory for the installation must be available at all pesticide facilities.

3. Pesticide Storage Facilities. The design of pesticide storage facilities must comply with standards described in reference (h). Existing facilities must comply with all applicable regulatory standards and will, where feasible, be modified to meet the standards for new pesticide storage facilities. Installations must prohibit the discharge of any wastewater from any pesticide mixing, or equipment cleanup area. Rinsate from triple-rinsed containers must be applied to the application site in accordance with the pesticide label. HW and storage requirements apply, in accordance with OSHA (see chapter 9 of this Manual).

4. Pesticide Disposal and Spill Management. Installation commanders must ensure that installation pest management programs are managed so that pesticides do not become HWs. The installation pest management coordinator must ensure that excess EPA-registered pesticides are either returned to the DLA Materials Return Program, transferred to a DOD installation able to use the materiel, or transferred to the servicing Defense Reutilization and Marketing Office (DRMO). The appropriate NAVFAC PMC will, if requested, provide assistance in identifying installations where usable pesticides could be applied. When the EPA publishes a proposed pesticide regulatory action that involves pesticide label suspension or cancellation affecting the DOD, installations must comply with administrative procedures developed between the DLA and the AFPMB. Installations must use the guidance in reference (i) for pesticide disposal. The installation IPM Plan must address a plan for pesticide spill management, coordinated with the installation's HM/HW programs, and included in the installation's OHSSCP (see chapter 9 of this Manual). Marine Corps personnel must follow the guidance in reference (j). Ready-to-use pesticide spill kits must be present in every storage and mixing facility, and in vehicles used to transport or apply pesticides. Contractors must be responsible for providing their own spill kits.

5. Pesticide Safety. To ensure the safe use of pesticides, Marine Corps personnel must handle and apply pesticides in accordance with the product's label directions and references (k) and ((l). Marine Corps policy prohibits construction of buildings with heating, ventilation, and air-conditioning (HVAC) ducts located in and below the floor to prevent accidental contamination of the ducts with termiticides. Similarly, Marine Corps policy prohibits post-construction treatment of structures with HVAC ducts without a waiver from the cognizant NAVFAC PMC.

6. Electrically Operated Devices. Except as noted in reference (l), Marine Corps personnel must not use electromagnetic exclusion or control devices, ultrasonic repellent or control devices, and outdoor devices for electrocuting flying insects on Marine Corps installations. However, indoor devices for electrocuting flying insects can be used when selected, purchased, located, and used in accordance with reference (m). Pest surveillance traps and monitoring equipment, such as non-electrocuting mosquito light traps, may be used as integral tools for IPM programs.

7. Occupied Spaces. Pesticide sprays, dusts, and aerosols shall not be

applied in occupied spaces (e.g., offices and housing). Approved baits, gels and non-chemical devices such as traps may be placed in safe locations within occupied spaces.

8. Paints and Coatings Containing Pesticides and other Biocides. The Marine Corps explicitly prohibits the use of paints containing insecticides on Marine Corps property. This guidance applies to both interior and exterior paints that contain insecticides intended for application to broad structural surfaces such as walls, ceilings, and siding. It also applies to insecticides formulated and labeled for use as paint additives. Paints containing fungicides as mildew inhibitors may be used when application directions specify no special restrictions due to the fungicide. Approved marine antifouling compounds or coatings may be applied to protect the surfaces of watercraft.

9. Preventive or Scheduled Pesticide Treatments. The Marine Corps explicitly prohibits the use of regularly scheduled, periodic pesticide applications, except in situations where the installation pest management plan clearly documents that no other technology or approach is available to protect personnel or property of high value. Installations must not use preventive pesticide treatments unless the appropriate NAVFAC PMC has given approval based upon current surveillance information or records documenting past disease vector or pest problems that require this approach.

#### 14206. PEST MANAGEMENT CONTRACTING

1. Background. The Marine Corps must use pest management contracts when cost-effective or when advantageous for non-routine, large-scale, or emergency services, especially when specialized equipment or expertise is needed. Contractors must comply with the regulatory requirements of the state in which the work will be performed regarding the certification, licensing, and registration of pest management companies and their employees. Foreign host nation contractors must comply with the FGS/JEGS or reference (g) of the host country. Pest control records will be maintained per reference (c), SSIC 4200.1b, as appropriate.

2. Review and Approval. NAVFAC PMCs must review and approve contract documents for pest management operations, including augmentation contracts to ensure that appropriate pest management standards and IPM are specified. This includes ensuring that all agricultural outlease and PPV housing lease agreements are also reviewed and approved. Contracting offices must award augmentation contracts only when the respective NAVFAC PMC has verified that the contract will provide necessary services beyond the capability of any in-house staff. Installations that lack expertise in pest management should request the services of a NAVFAC PMC to develop the technical portions of pest management contracts in accordance with reference (n). NAVFAC PMCs must act as technical consultants during the performance of contracted work.

3. Quality Assurance. Installation commanders must base PMPAR staffing decisions on the following factors:

a. The number of pest management operations requiring 100 percent inspection.

- b. The number of different functions being performed simultaneously.
- c. The scope of the contract including required productive work-years.
- d. The level of monitoring or surveillance required for each operation.

4. Government Purchase Cards (GPCs). All pest management services procured using GPCs shall be reviewed in advance by the responsible pest management professional, be performed by state-licensed firms and operators state-certified in the proper category of pest management for the planned work, be under the cognizance of the installation PMC, and be reported on the installation pesticide use report. Installation policies regarding use of GPCs for pest control shall be addressed in installation IPMPs. Cardholders are not authorized to contract for purchase of pesticides without prior approval from the responsible NAVFAC PMC.

14207. SPECIALIZED PEST MANAGEMENT OPERATIONS

1. Aerial Application of Pesticides. Documentation for aerial application projects must be kept in accordance with DOD and Marine Corps environmental requirements including compliance with the requirements of reference (o). A designated PMC at NAVFAC, who is certified in the aerial application pest control category, approves all proposed pest management projects that involve the aerial application of pesticides. Approval must be obtained before aerial application operations commence. Cognizant NAVFAC PMCs must collaborate, as appropriate, with the 910th Airlift Wing (Air Force Reserve) during the review and approval process for aerial spray projects to be completed by the 910th. Installation commanders must ensure that installation personnel update documentation for project approval if subsequent aerial application operations are planned.

2. Disinsection of Military Aircraft. Marine Corps personnel must disinsect military aircraft for disease vectors and agricultural pests only when:

- a. Required by a foreign nation as a prerequisite to entry as specified in reference (p).
- b. Mandated by the United States Department of Health and Human Services or the U.S. Department of Agriculture (USDA).
- c. Directed by a command-level or higher authority who has determined that the point of embarkment has active vector-borne disease, consistent with references (q) and (r).
- d. No passengers are on board (except when mandated by reference (p)).

3. Forest Pests. Marine Corps commanders must cooperate with the USDA, Forest Service, on applicable pest management programs, including annual USDA funding for forest insect and disease suppression projects on Marine Corps-controlled land in accordance with reference (s) (see also reference (t)).

4. Medically Important Pests. The Marine Corps must ensure that responsibilities for surveillance and control of medically important insects

and other arthropods are clearly delineated in installation IPMPs and operational plans. Specific guidance on the surveillance and control of Lyme disease vectors is found in reference (u).

5. Pesticide Applications in the Range of Endangered Species. The Marine Corps must comply with regulations, including those issued under the reference (v), which requires Federal agencies to ensure that their actions will not jeopardize ETS or associated habitat. Installation commanders shall ensure that their installation IPMPs consider ETS. IPMPs must shall comply with USFWS limitations on pesticide usage. OCONUS installations shall comply with the FGS/JEGS and reference (g).

6. Pests in Health Care Facilities. Installation commanders must ensure that pest management in health care facilities is conducted according to the guidance in reference (w).

7. Pest Management in Child Care and Food Service Facilities. Installation commanders must ensure that responsibilities for surveillance and control of insects and other arthropods in child care and food service facilities are clearly delineated in installation IPMPs and operations.

8. Pest Management in Military Quarters and Housing

a. Background. Installation commanders must ensure that residents of military quarters and housing practice good sanitation and correct minor nuisance pest problems. Per reference (b), PPV housing is subject to the same requirements as Base operated housing. PPV housing contracts and lease agreements must include appropriate pest management provisions, and must be reviewed for approval by the respective NAVFAC PMC. Quarters and housing occupants are responsible for controlling pests such as cockroaches, household infesting ants, and mice not originating in other quarters. The control of medically important pests, including venomous arthropods, which could affect human health, and structural pests which could damage property, are not the occupant's responsibility.

b. Installation Role

(1) Installation commanders must ensure that installation pest management services are provided in military housing only when the pest threatens government property or the occupants' health and when the occupants have been unable to control the pests through self-help efforts. Exceptions must only be made with the concurrence of the cognizant NAVFAC PMC.

(2) Installation commanders may allow residents of military housing to contract with licensed pest management companies at their own expense.

c. Self-Help Program

(1) Installation commanders must establish installation self-help pest management for military housing when cost-effective and when IPM monitoring indicates the need for a self-help program. Self-help pest management materials issued to occupants of military housing may include cockroach and ant baits and/or traps, mouse traps, and glue boards, as

recommended by the cognizant NAVFAC PMC. Liquid pesticides should not be issued. The office designated to manage the installation's self-help program should coordinate procurement and the storage of pest management materials with the installation pest management shop, HM manager, and the DLA Supply Center.

(2) Installation commanders must ensure that self-help personnel provide written instructions and appropriate precautions, beyond those on pesticide labels, to military quarters' and housing occupants to ensure proper pesticide application and safety.

(3) If pesticides are issued to occupants, records must be maintained as described in paragraph 14104.1g. These records should enable installation self-help personnel to validate the occupant's attempts to control target pests before providing installation pest management services. NAVFAC PMCs should review these records during annual reviews to evaluate the efficiency of the installation's self-help program.

(4) The NAVFAC PMC may develop non-housing self-help programs as documented in the installation IPMP. These programs may include nuisance pest control at small, detached facilities or spot control of weeds in sidewalks around a facility. The PMC and Environmental Department shall approve the program and provide training to the self-help applicators prior to pesticide application. The applicators shall use only ready-to-use pesticides authorized by the PMC and listed on the installations authorized pesticide use list. All applications shall be recorded and reported in accordance with paragraph 14104.1g.

9. Pest Management at Closing Installations. Because pests may cause serious damage to unused facilities, commanders must ensure that NAVFAC PMCs provide guidance needed to protect all closing or closed facilities from pests from the beginning of deactivation until property disposal.

10. Quarantinable Pests. Reference (r) contains policy for quarantine regulations applicable to the Marine Corps and Navy.

11. Stored Products Pests. Installation commanders must implement measures to minimize insect and vertebrate pest damage to subsistence, clothing and textiles, medical, and other infestible stored materiel according to reference (x). Commanders must ensure that the fumigation of subsistence stocks follows the guidance provided in reference (y). Guidance for protecting Meal, Ready-to-Eat Rations is available from the NAVFAC PMCs. Reference (z) provides pest management guidance on infestible stored products.

12. Turf and Ornamental Pests. Installation commanders must implement measures to prevent unacceptable damage to shade trees, ornamental plantings, and turf (including golf courses) by insects, diseases, and weeds. Further, they must ensure that pesticide applications, if required, are based on the specific identification of the target pest by trained personnel. The pest management plan must identify recurring infestations. Installation commanders must ensure that the installation IPMP describes the use of IPM for turf and ornamental pests, and environmentally and economically

beneficial land management practices, such as the use of native plants to reduce pesticide use.

13. Undesirable Plants. Installation commanders must develop programs to comply with reference (aa). Installation commanders must:

a. Designate an office or person adequately trained in the management of undesirable plant species to develop and coordinate the installation undesirable plant management program.

b. Plan, program, and budget to achieve, maintain, and monitor compliance with reference (aa).

c. Ensure that installations complete and carry out cooperative agreements with state agencies regarding the management of undesirable plant species on installations.

d. Establish integrated management systems to control or contain undesirable plant species targeted under cooperative agreements. Reference (aa) does not require the commanders to carry out programs on installations unless similar programs are being implemented on state or private lands in the vicinity of the installation.

14. Vertebrate Pests. Installation commanders must manage vertebrate pests in accordance with the MOA between the DOD and USDA, Animal Plant Health Inspection Service, Animal Damage Control and:

a. Implement vertebrate pest management programs including wildlife aircraft strike hazard reduction programs to prevent interference with operations, destruction of real property, and adverse impacts on health and morale.

b. Cooperate with Federal, state, and local agencies that have implemented animal damage control programs on adjacent public and private lands.

c. Identify the potential for secondary and nontarget effects to other organisms and design programs to preclude or minimize the risks.

d. Obtain all applicable Federal, state, and local permits.

e. Use guidance in reference (ab), for conducting feral cat control programs.

15. Weed Control. Installation commanders must ensure that weed control is performed according to references (ac) and (t), on Marine Corps installations. Herbicides will not be used in war except as provided for in reference (ad).

16. Wood-Destroying Organisms. Installation commanders must ensure that:

a. NAVFAC PMCs review construction, repair, and termite control contract specifications for the proper protection of wood where wood-destroying fungi

and insects are present, and specify that termiticides, when needed, are applied at the highest EPA-labeled concentration and application rate.

b. DOD-certified pesticide applicators or PMPARs trained in pest management inspect contract applications of pesticides for the control of termites and other wood-destroying organisms.

c. Trained personnel inspect wooden buildings and structures in the range of termites annually in USDA geographic Region 1 or if Formosan or drywood termites are present; biennially in USDA Region 2; or triennially in Region 3, as determined by the cognizant pest management professional. Installation commanders must follow the guidance in reference (m), for these inspections.

17. Wood Preservation. Reference (ae) provides information on wood preservation. Commanders must ensure that DOD pest management professionals review construction specifications and procurement contracts to minimize losses to real property and materiel by specifying:

a. Proper use of wood products treated with preservatives (pesticides) where required to protect against losses caused by wood-destroying fungi and insects.

b. Inspection of treated wood products, performed by trained installation personnel. This inspection must require at a minimum:

(1) The examination of treated wood products to determine the presence of the American Lumber Standard Committee accredited inspection agency quality marking. Quality markings indicate conformance with the appropriate American Wood Preservers' Association and American National Standard Institute standards. Quality markings indicate that the product has been tested by the agency indicated, the date it was tested, the type of use (above ground, ground contact, or marine contact suited), and the minimum amount of chemical preservative present. Unmarked material shall be tested by an independent third party. Certificates of conformance from the treating company must not be accepted in place of physical inspection and testing.

(2) Random or planned sampling and testing.

c. Programs to protect waterfront structures from decay and marine borers.

14208. PEST MANAGEMENT AND DISEASE VECTOR CONTROL DURING MILITARY CONTINGENCY OPERATIONS, READINESS TRAINING EXERCISES, AND DEPLOYMENTS

1. Complying with the DOD Pest Management Program. Military, civilian personnel, and contractors responsible for pest management and disease vector control during military contingency operations, readiness training exercises, and deployments must apply pesticides consistent with the policies and procedures described in reference (a).

2. Application. The application of pesticides for pest management and disease vector control during military, contingency operations, readiness training exercises, and deployments must be under the overall direction of

personnel certified in accordance with reference (e), authorized by reference (a). Individuals who apply pesticides in these situations must be certified in accordance with reference (e), authorized by reference (a), or must be under the direct or onsite supervision of individuals certified in accordance with reference (e), authorized by reference (a). Shipboard independent duty technicians and other military personnel who have received special training for limited site application of preselected pesticides during military operations or deployments are exempt from the certification requirement. However, these individuals must be fully trained, including hands-on training for these specific applications. Commanders must develop specific site training programs for these individuals and a means to document who has received this training. At a minimum, the training must include the safe use and proper application of the limited, preselected pesticides for the specific site for which these individuals are trained.

3. Contractors. Contractors who apply pesticides in these situations must comply with the FGS/JEGS and reference (g) of the host country.

4. Recordkeeping. Installation commanders must ensure that pesticide use in these situations is recorded completely and accurately and maintained per reference (c), SSIC 5090.4.

#### 14209. REPORTS AND RECORDS

1. Record Keeping. Maintain complete daily pesticide application and pest management operations records as required by section 136i-1 of reference (f). Maintain daily records of pesticides applied outside to PPV housing. All pest management operations shall be reported using the NAVFAC PPMC approved/provided Online Pesticide Reporting System or the Pest Management Record Spreadsheet to provide an electronic copy of the data. The website for the NAVFAC Online Pesticide Reporting System is:

<https://clients.emailc.com/PestManagementNET/PesticideLogon.aspx>. The regional NAVFAC Professional PMC should be contacted to obtain a password and instructions to use the system. A copy of the Pest Management Record Spreadsheet can be found at:

<http://www.afpmb.org/pubs/pesticideuse/pesticide.htm>. The report shall include individual daily records of all pest control operations, both chemical and non-chemical, including surveys. Records should be electronically submitted on a monthly basis through the NAVFAC Online Pesticide Reporting System or the Pest Management Record Spreadsheet (Microsoft Excel, 1997 or later version) via CD, e-mail attachment, etc.

a. Records must include information on kinds, amounts, uses, dates, places of application, applicators names, and certification numbers.

b. The record must include all pesticide applications performed on the installation, including work done on golf courses, by non-appropriated fund activities, by contract services, and as part of outleases and land management and forestry programs, as well as work performed by installation pest management shops.

c. Records of all pesticide applications must be retained per reference (c), SSIC 5090.4.

2. Pest Management Report. Maintain complete daily pesticide application and pest management operations records as required by section 136i-1 of reference (f). Maintain daily records of pesticides applied outside to PPV housing. All pest management operations shall be reported using the NAVFAC PPMC approved/provided Online Pesticide Reporting System or the Pest Management Record Spreadsheet to provide an electronic copy of the data. The website for the NAVFAC Online Pesticide Reporting System is: <https://clients.emailc.com/PestManagementNET/PesticideLogon.aspx>. The regional NAVFAC Professional PMC should be contacted to obtain a password and instructions to use the system. A copy of the Pest Management Record Spreadsheet can be found at <http://www.afpmb.org/pubs/pesticideuse/pesticide.htm>. The report shall include individual daily records of all pest control operations, both chemical and non-chemical, including surveys. Records should be electronically submitted on a monthly basis through the NAVFAC Online Pesticide Reporting System or the Pest Management Record Spreadsheet (Microsoft Excel, 1997 or later version) via CD, e-mail attachment, etc.
3. Consultants. NAVFAC PMCs must use these data to evaluate the efficiency of the overall installation pest management program and pest management operations.
4. Exclusions. Pesticides applied by installation personnel for their own relief are excluded from the record keeping requirement.
5. NAVFAC. All of the functions and records supporting Marine Corps installation pesticide programs are performed, prepared, and maintained by the supporting NAVFAC Applied Biology Program.

CHAPTER 14

PESTICIDE POLLUTION PREVENTION

SECTION 3: RESPONSIBILITIES

14300. CMC (LF)/COMMANDER MCICOM

1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in reference (a).
2. Require IPM techniques in pest management programs as a means to reduce pesticide risk and prevent pollution.
3. Exercise oversight and review of installation pest management programs from the Marine Corps major command and headquarters level.
4. Maintain accurate and complete reporting and record keeping of pest management operations and pesticide use per reference (c), SSIC 5090.4.
5. Ensure that actions taken under the policies outlined in this chapter are consistent with DOD environmental security specifications.
6. Ensure the implementation of IPM in the Marine Corps pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.
7. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with state and local governments, and with host-nation agencies involved with pest management when human health is an issue.
8. Ensure that the cognizant NAVFAC PMC reviews the installation pest management program on site at least every 36 months. When possible, conduct the review as part of the ECE program.
9. Implement pest management practices and answer data calls for information on pesticides from the Deputy Under Secretary of Defense, Environmental Security.
10. Cooperate with state and local government agencies involved with pest management.
11. Monitor and track the use of IPM and reduction of pesticide use in installation pest management programs.
12. Ensure that each installation has an IPMP and that the installation IPM Coordinators maintain the program. The cognizant NAVFAC PMCs assist the IPM Coordinator through technical assistance, program review, and program guidance.
13. Ensure that installations receive state-of-the-art technical assistance in IPM. Ensure that pest management professionals who are designated NAVFAC

PMCs are available on request and to provide follow-up assistance to ECEs.

14. Comply with reference (b).

15. Provide support to Marine Corps installations, commands, units, and tenants by interpreting Federal, state, local, and overseas pest management regulatory requirements and by uniformly applying Marine Corps policy as set forth in this Manual.

16. Conduct special environmental compliance and protection studies with regard to pest management to assist in establishing policy or initiating actions.

14301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES AND ALL INSTALLATIONS, UNITS, INCLUDING SHIPS, STATIONS, AND DEPLOYED PERSONNEL WHERE PEST MANAGEMENT OPERATIONS ARE PERFORMED

1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in reference (a).

2. Require IPM techniques in their pest management programs as a means to reduce pesticide risk and prevent pollution.

3. Exercise oversight and review of installation pest management programs from the Marine Corps major command and headquarters level.

4. Maintain accurate and complete reporting and record keeping of pest management operations and pesticide use.

5. Implement programs to achieve, maintain, and monitor compliance with applicable Federal, state, and local statutory and regulatory requirements for pest management.

6. Ensure that commanders of deployed forces enforce the use of all appropriate personal protection measures, including arthropod skin and clothing repellents and bed nets, to protect their troops from vector-borne diseases and rodent and arthropod health threats.

7. Maintain complete daily pesticide application and pest management operations records as required by section 136i-1 of reference (f). Maintain daily records of pesticides applied outside to PPV housing. These records shall be retained per reference (c), SSIC 5090.4. All pest management operations shall be reported using the NAVFAC PPMC approved/provided Online Pesticide Reporting System or the Pest Management Record Spreadsheet to provide an electronic copy of the data. The website for the NAVFAC Online Pesticide Reporting System is:

<https://clients.emailc.com/PestManagementNET/PesticideLogon.aspx>. The regional NAVFAC Professional PMC should be contacted to obtain a password and instructions to use the system. A copy of the Pest Management Record Spreadsheet can be found at

<http://www.afpmb.org/pubs/pesticideuse/pesticide.htm>. The report shall include individual daily records of all pest control operations, both chemical and non-chemical, including surveys. Records should be electronically submitted on a monthly basis through the NAVFAC Online

Pesticide Reporting System or the Pest Management Record Spreadsheet (Microsoft Excel, 1997 or later version) via CD, e-mail attachment, etc.

8. Ensure the implementation of IPM in the Marine Corps pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.

9. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with state and local governments, and with host-nation agencies involved with pest management when human health is an issue.

10. Ensure that the cognizant NAVFAC PMC reviews the installation pest management program on site at least every 36 months. When possible, conduct the review as part of the ECE program. Installation IPM Coordinators shall annually review installation IPMPs for adherence to the DOD specifications described in reference (a).

11. Establish procedures to ensure that recommendations from onsite pest management program reviews and annual reviews of pest management plans will result in appropriate corrective action.

12. Monitor pesticides available for purchase in Marine Corps commissaries and exchanges to ensure the pesticides available for sale are least-hazardous pesticides that are compatible with DOD IPM programs and are pesticides that comply with applicable Federal, state, and local laws. Marine Corps commissaries and exchanges OCONUS shall comply with the FGS/JEGS and reference (g) of the host country.

13. Cooperate with state and local government agencies involved with pest management.

14. Provide management support, resources, and a professionally qualified pest management staff sufficient to ensure the effective implementation of pest management programs at all organizational levels.

15. Establish surveillance programs to assess potential adverse environmental or public health effects from pesticide use and to monitor the health and safety of persons who apply pesticides.

16. Monitor the use of IPM and the reduction of pesticide use in installation pest management programs.

17. Ensure that each installation has an IPMP and that the IPM Coordinators maintain the program. The cognizant NAVFAC PMCs assist the IPM Coordinator through technical assistance, program review, and program guidance. Installation commanders shall:

- a. Plan and budget for the development and maintenance of the IPMP.
- b. Ensure that qualified personnel develop and update the IPMP annually.
- c. Formally designate an installation IPM Coordinator to implement the

IPMP.

d. Ensure that the IPM Coordinator formally coordinates appropriate portions of the pest management plan with the senior medical officer, environmental coordinator, and senior engineering officer and ensure that these individuals sign the cover sheet of the IPMP.

e. Ensure that appropriate portions of the IPMP are reviewed by the natural resources program manager for consistency with the INRMP.

f. Ensure that the IPM Coordinator forwards the IPMP to the cognizant NAVFAC PMC for review, technical approval, and signature on the cover sheet.

g. Approve and sign the IPMP for implementation.

h. Ensure implementation of the IPMP and oversight of the installation pest management program by the IPM Coordinator.

i. Ensure that all pest management operations performed on the installation, except those for personal relief, are recorded, and ensure that all records are properly maintained and are reported to the cognizant NAVFAC PMC.

18. Comply with reference (b).

19. Coordinate these functions with the supporting NAVFAC Applied Biology section as appropriate.

20. Identify and submit to the CMC (LF) project documentation and funding requests for pesticide P2 management that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with pesticide P2 management requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.

14302. ALL INSTALLATIONS, UNITS, AND MARFORRES, INCLUDING SHIPS, STATIONS, AND DEPLOYED PERSONNEL WHERE PEST MANAGEMENT OPERATIONS ARE PERFORMED

1. Installation pest management coordinators shall annually review installation pest management plans for adherence to the DOD specifications described in reference (a).

2. Require IPM techniques in their pest management programs as a means to reduce pesticide risk and prevent pollution.

3. Exercise oversight and review of installation pest management programs from the Marine Corps major command and headquarters level.

4. Maintain accurate and complete reporting and record keeping of pest management operations and pesticide use.

5. Implement programs to achieve, maintain, and monitor compliance with applicable Federal, state, and local statutory and regulatory requirements for pest management.
6. Ensure that commanders of deployed forces enforce the use of all appropriate personal protection measures, including arthropod skin and clothing repellents and bed nets, to protect their troops from vector-borne diseases and rodent and arthropod health threats.
7. Ensure that any pesticide applications, excluding arthropod skin and clothing repellents, performed during military operations are recorded and reported using the NAVFAC Online Pesticide Reporting System or the NAVFAC excel spreadsheet. Maintain these records per reference (c), SSIC 5090.4.
8. Ensure the implementation of IPM in the Marine Corps pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.
9. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with state and local governments, and with host-nation agencies involved with pest management when human health is an issue.
10. Ensure that the cognizant NAVFAC PMC reviews the installation pest management program on site at least every 36 months. When possible, conduct the review as part of the ECE program. Installation IPM Coordinators shall annually review installation IPMPs for adherence to the DOD specifications described in reference (a).
11. Establish procedures to ensure that recommendations from onsite pest management program reviews and annual reviews of IPMPs will result in appropriate corrective action.
12. Monitor pesticides available for purchase in Marine Corps commissaries and exchanges to ensure that the pesticides available for sale are least-hazardous pesticides that are compatible with DOD IPM programs and are pesticides that comply with applicable Federal, state, and local laws. Marine Corps commissaries and exchanges OCONUS shall comply with the FGS/JEGS and reference (g) of the host country.
13. Cooperate with state and local government agencies involved with pest management.
14. Provide management support, resources, and a professionally qualified pest management staff sufficient to ensure the effective implementation of pest management programs at all organizational levels.
15. Establish surveillance programs to assess potential adverse environmental or public health effects from pesticide use and to monitor the health and safety of persons who apply pesticides.
16. Monitor the use of IPM and reduction of pesticide use in installation pest management programs.

17. Ensure that each installation has an IPMP and that the IPM Coordinators maintain the program. The cognizant NAVFAC PMC assists the IPM Coordinator through technical assistance, program review, and program guidance. Installation commanders shall:

- a. Plan and budget for the development and maintenance of the IPMP.
- b. Ensure that qualified personnel develop and update the IPMP annually.
- c. Formally designate an installation IPM Coordinator to implement the IPMP.
- d. Ensure that the IPM Coordinator formally coordinates appropriate portions of the IPMP with the senior medical officer, environmental coordinator, and senior engineering officer and ensure that these individuals sign the cover sheet of the IPMP.
- e. Ensure that appropriate portions of the IPMP are reviewed by the natural resources program manager for consistency with the INRMP.
- f. Ensure that the IPM Coordinator forwards the IPMP to the cognizant NAVFAC PMC for review, technical approval, and signature on the cover sheet.
- g. Approve and sign the IPMP for implementation.
- h. Ensure the implementation of the IPMP and oversight of the installation pest management program by the IPM Coordinator.
- i. Ensure that all pest management operations performed on the installation, except those for personal relief, are recorded, and ensure that all records are properly maintained and are reported to the cognizant NAVFAC PMC.

18. Comply with reference (b).

19. Many of these functions are performed by the supporting NAVFAC Applied Biology section.

REFERENCES

- (a) DOD Instruction 4150.07, "DOD Pest Management Program," May 29, 2008
- (b) OPNAVINST 6250.4 Series
- (c) SECNAV 5210.1
- (d) AFPMB Technical Guidance 18, "Installation Pest Management Program Guide," March 2003
- (e) DOD Directive 4150.07-M, Volume 1 "DOD Pest Management Training: The DOD Plan for the Certification of Pesticide Applicators," December 12, 2008
- (f) 7 U.S.C. 136-136y
- (g) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (h) AFPMB Technical Guide No. 17, "Military Handbook - Design of Pest Management Facilities," August 2009
- (i) AFPMB Technical Guide 21, "Pesticide Disposal Guide for Pest Control Shops," July 2002
- (j) AFPMB Technical Guide No. 15, "Pesticide Spill Prevention and Management," August 2009
- (k) AFPMB Technical Guide No. 14, "Personal Protective Equipment for Pest Management Personnel," March 1992
- (l) AFPMB Technical Guide 16, "Pesticide Fires: Prevention, Control, and Cleanup," June 1981
- (m) AFPMB Technical Guide No. 29, "Integrated Pest Management in and Around Buildings," August 2009
- (n) AFPMB Technical Guide No. 39, "Guidelines for Preparing DOD Pest Control Contracts Using Integrated Pest Management," February 1997
- (o) 42 U.S.C. 4321
- (p) DOD Directive 4500.54-G, "DOD Foreign Clearance Guide (FCG)," January 5, 1992 (NOTAL)
- (q) Army Regulation 40-12/AFJI 48-104, "Quarantine Regulations of the Armed Forces," January 24, 1992
- (r) OPNAVINST 6210.2
- (s) Memorandum of Agreement FSM 1533.31, "Forest Insect and Disease Suppression Agreement," dtd Dec 90
- (t) AFM 91-19/TM 5-629/NAVFAC MO-314, "Weed Control and Plant Growth

Regulation," May 24, 1989

(u) AFPMB Technical Guide 26, "Tick-Borne Diseases: Vector Surveillance and Control," February 2006

(v) 16 U.S.C. 1531-1544

(w) AFPMB Technical Guide 20, "Pest Management Operations in Medical Treatment Facilities," November 2005

(x) AFPMB Technical Guide 27, "Stored-Product Pest Monitoring Methods," May 2005

(y) AFPMB Technical Guide 11, "Hydrogen Phosphide Fumigation with Aluminum Phosphide," November 1998

(z) DLA Regulation 4145.31, "Integrated Stored Products Pest Management Program," June 20, 2002

(aa) 7 U.S.C. 2801

(ab) AFPMB Technical Guide 37, "Guidelines for Reducing Feral/Stray Cat Populations on Military Installations in the United States," January 1996

(ac) 16 U.S.C. 4701-4751

(ad) Executive Order 11850, "Renunciation of Certain Uses in War of Chemical Herbicides and Riot Control Agents," April 8, 1975

(ae) NAVFAC MO-312

CHAPTER 15

POLLUTION PREVENTION

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CHAPTER 15

POLLUTION PREVENTION

SECTION 1: INTRODUCTION

15100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with P2 and TRI reporting requirements under reference (a) and reference (b), as set forth by references (c) and (d), and in accordance with DOD policy and guidance. The P2 program shall be aligned with, and integrated into, appropriate elements of the Marine Corps EMS, to ensure a consistent approach and avoid potential duplication of effort.

15101. APPLICABILITY. See paragraph 1101.

15102. BACKGROUND

1. Laws. In addition to references (a) and (b), the following statutes contain P2 requirements: references (e), (f), (g), (h), (i), (j), (k), and (l).

2. E.O.s. The following E.O.s require P2 activities: references (c) and (d); and reference (m).

3. Relationship of P2 to Other Environmental Program Areas. P2 is a cross-cutting program with relevance to most other environmental program areas.

a. For Alternatively-Fueled Vehicle (AFV) and energy conservation requirements, see chapter 6 of this Manual.

b. For P2 requirements pertaining to emergency planning and response, see chapter 7 of this Manual.

c. For Marine Corps policy on meeting RCRA HW minimization requirements, see chapter 9 of this Manual.

d. For a discussion on NEPA documentation relating to P2 planning, see chapter 12 of this Manual.

e. For Marine Corps policy on pesticide P2, see chapter 14 of this Manual.

f. For Marine Corps water conservation policies, see chapter 16 of this Manual.

g. For Marine Corps policy on solid waste (SW) reduction and recycling, see chapter 17 of this Manual.

h. For nonpoint source P2 requirements, see chapter 20 of this Manual.

i. For Marine Corps policy on ozone-depleting substances (ODSs), see reference (n).

15103. FEDERAL STATUTES

1. The Pollution Prevention Act (PPA) of 1990 (42 U.S.C. 13101 et seq.).

This Act establishes the national policy that "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."

2. CERCLA of 1980, as Amended (42 U.S.C. 9601 et seq.). This Act is intended to provide funding and enforcement authority for cleaning up waste disposal sites and for responding to HS spills. CERCLA establishes a comprehensive response program for past HW activities and the planning and response framework for HS releases.

3. EPCRA of 1986 (42 U.S.C. 11001 et seq.). This Act, which is title III of SARA, encourages and supports emergency planning and requires that the public receive timely and comprehensive information about possible or potential hazards associated with toxic chemical releases. Most notably, specific sections of EPCRA require immediate notification of releases of EHSs and HSS defined under CERCLA to state and local emergency response planners. EPCRA requires state and local coordination in planning response actions to chemical emergencies. The Act also requires the submission of information on chemical inventories and releases.

4. EPACT of 1992 (Public Law 102-486). EPACT seeks to enhance the Nation's long-term energy security by reducing dependency on imported oil and improving energy efficiency and reducing air emissions from fossil fuels. EPACT establishes a Federal leadership strategy that encourages automobile manufacturers and fuel suppliers to expand the commercial availability of alternative fuels and AFVs. Under EPACT, Federal agencies must acquire increasing numbers of AFVs, reduce energy consumption, and increase energy efficiency.

5. CAA of 1970, as Amended (42 U.S.C. 7401 et seq.). The 1990 Amendments to the CAA mandate P2 measures, such as the use of clean fuels and AFVs.

6. RCRA of 1976 (42 U.S.C. 6901 et seq.). The 1984 HSWA to RCRA encourage P2 by requiring HW generators to certify that they have developed programs capable of reducing the volume, quantity, and toxicity of their waste as part of their biennial report. RCRA also requires Federal agencies to establish GP programs.

7. CWA of 1977, as Amended (Public Law 95-217, 33 U.S.C. 1251 et seq.). The 1987 Amendments to the CWA establish the regulation of storm water discharges from industrial facilities and require states to establish nonpoint source pollution management programs that identify BMPs for reducing nonpoint source pollution.

8. EISA of 2007 (Public Law 110-140). This Act seeks to move the United States toward greater energy independence and security; to increase the production of clean renewable fuels; to protect consumers; to increase the efficiency of products, buildings, and vehicles; to promote research on and deploy GHG capture and storage options; and to improve the energy performance of the Federal Government. The Act requires Federal agencies to: reduce petroleum consumption and increase alternative fuel consumption for Federal fleet vehicles, increase energy and water efficiency in Federal buildings,

and promote high-performance green Federal buildings, the procurement of energy efficient products, and their inherent environmental benefits.

15104. REQUIREMENTS

1. E.O. 13423, January 24, 2007, and Instructions for Implementing E.O. 13423, March 29, 2007

a. Reference (c) requires Federal agencies to conduct their facility management and acquisition activities so that, as much as possible, the quantity of toxic chemicals and HCs and materials acquired, used, or disposed of, is eliminated or reduced; that SW diversion is increased; and that facilities maintain cost-effective waste prevention and recycling programs.

b. Reference (d) requires Federal agencies to develop written goals and support actions to identify and reduce the release and use of toxic and hazardous chemicals, including HSS, ODSs, and other pollutants that may result in significant harm to human health or the environment.

c. Reference (c) requires Federal agencies and applicable facilities to continue to comply with the provisions set forth in section 301 through 313 of reference (a), section 6607 of reference (b), all implementing regulations, and future amendments to these authorities. In addition, as required by section 3(e) of reference (c), Federal agencies must include provisions in their contracts to require contractors to provide information needed by their facilities to comply with references (a), (b), and (c).

d. The implementing instructions of reference (c) also require the DOD to incorporate design, construction, operation, and maintenance practices that support sustainable high performance building goals for new construction to support increase in the use of green materials, protect and conserve water, improve indoor air quality, encourage the use of renewable energy sources, and optimize energy efficiency<sup>2</sup>.

2. PPA

a. Reference (b) establishes the following EMH:

- (1) Source reduction.
- (2) Recycling.
- (3) Treatment.
- (4) Disposal.

b. Source reduction activities are the most desirable option as they often reduce the amount of non-product output generated by a manufacturing process and result in lower life-cycle costs. In addition, source reduction reduces the volume and toxicity of pollution versus simply transferring it from one medium to another. Source reduction generally includes "in-process recycling" or "reuse," but not "out-of-process recycling."

3. Defense Acquisition and Mandatory Procedures for Major Acquisition Programs and Major Automated Information Systems Acquisition Programs. See reference (o) for information on policy, responsibilities, and procedures for

integrating P2 requirements into all aspects of DOD acquisition programs, including weapons systems acquisition programs. DOD Service Acquisition Executives, Program Executive Officers, and Program Managers must consider using P2 as an integral element of systems, system components, and associated support items in all program phases (entire system life-cycle), including the revision of standardized documents; military specifications and standards; technical manuals, orders, and bulletins; and other related documents.

4. ESOH. See reference (p) for information on policies, procedures, and responsibilities for evaluating all activities for current and emerging ESOH resource requirements and making prudent investments in initiatives that support P2.

5. DOD P2 Requirements

a. Comply with applicable Federal, state, and local environmental laws, regulations, and standards as well as with relevant E.O.s. Installations located outside the United States should comply with applicable E.O.s; international agreements; Federal statutes with extraterritorial effect; and with either the FGS, JEGS, or reference (q) when no FGS or JEGS has been issued.

b. Reduce the use of HM, the generation or release of pollutants, and the adverse effects on human health and the environment caused by DOD activities.

c. Reduce pollution through improvements in energy and water efficiency, the use of alternative fuels, and other activities that improve resource utilization.

6. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

15105. TERMS AND DEFINITIONS

1. AFV. Passenger cars or trucks (light-duty vehicles) and heavy-duty trucks or buses that have been designed or modified to operate on alternative fuels as defined in subpart (g)(2) of reference (r).

2. Article. A manufactured item that is formed to a specific shape or design during manufacture and has functions dependent in whole or in part upon its shape or design during end-use and which does not release, or otherwise result in exposure to, a toxic chemical under normal conditions of use.

3. Authorized Use List (AUL). The list of all HM necessary to support the requirements of a command, facility, or activity, developed per DOD specifications.

4. Environmentally Preferable. Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, product, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or

service (reference (d)).

5. EMH. EMH is a national policy established by reference (b) that "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."

6. Environmental Quality Classes. These environmental compliance classes are designated by the DOD as described in chapter 3 of this Manual.

7. Facility. All buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and that are owned or operated by the same person, otherwise known as the "host" or the "fenceline owner." For the purposes of section 304 of reference (a), the term includes motor vehicles, rolling stock, and aircraft.

8. GP. As defined by DOD Green Purchasing Program policy, GP is the purchase of environmentally preferable products and services in accordance with Federally-mandated 'green' procurement preference programs.

9. HC. A chemical that is a physical or health hazard as defined in reference (s).

10. HM

a. In general, any material, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment. Included in this definition are all EHSSs, HCs, HSSs, and toxic chemicals.

b. For the following list of HMs, consult other hazard-specific guidance (instructions or directives) that takes precedence over this Manual: ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury.

11. Hazardous Materials Consolidation Program (HCP). The Marine Corps-wide program to achieve life-cycle control and management of HM through the application of sound management practices that minimize the types and quantities of HM procured, stored, distributed, and used to accomplish mission requirements at commands and installations.

12. HS. Any material that is regulated as HM per section 173.2 of reference (t); requires a MSDS per reference (s); or which during end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have the potential to meet the definition of HW as defined by subparts A, B, C, or D of reference (u).

13. HW. A SW or combination of SWs which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

a. Cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible, or incapacitating, reversible illness.

b. Pose a substantial hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Note that state regulations may be more stringent and take precedence over Federal regulations.

14. P2. Refers to "source reduction," and recycling as defined in reference (b) and other practices that reduce or eliminate the creation of pollutants through:

a. Increased efficiency in the use of raw materials, energy, water, or other resources.

b. Protection of natural resources by conservation (see the definition of "Source Reduction" below).

c. Examples of P2 techniques include:

- (1) Input substitution.
- (2) Product reformulation.
- (3) Process redesign/modification.
- (4) Improved operation and maintenance.
- (5) Reuse (in-process recycling).

15. Pollution/Pollutants. Refers to all nonproduct outputs, regardless of any recycling or treatment that will or may reasonably be anticipated to, cause deleterious effects to the public health or the environment. All nonproduct outputs, regardless of any recycling, treatment, or management, that may prevent or mitigate releases into the environment.

16. Recycling. If pollution generation cannot be prevented, then strategies that minimize the amount of waste generated should be implemented, such as recycling. These activities may include collection, separation, and processing, by which products or other materials are recovered from the SW stream for use in the form of raw materials in the manufacturing of new products other than fuel for producing heat or power by combustion (reference (d)). Recycling also includes using, reusing, or reclaiming materials, as well as processes that regenerate a material or recover a usable product from it.

17. Source Reduction. Source reduction, as defined in reference (b), is any practice that:

a. Reduces the amount of any HS, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal.

b. Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

c. The term includes equipment or technology modification; process or procedure modification; reformulation or redesign of products; substitution of raw materials; and improvements in housekeeping, maintenance, training, or inventory control. Source reduction does not entail any form of waste management (e.g., recycling, treatment, and disposal).

18. Source Separation. The separation of recyclable materials at their point of generation by the generator.

19. Toxic Chemical. A chemical as defined in subpart c of reference (v). Any substance listed in reference (w).

20. Waste Minimization

a. Source reduction and the following types of recycling:

(1) Beneficial use/reuse.

(2) Reclamation.

b. Waste minimization does not include recycling activities that constitute disposal or burning for energy recovery.

CHAPTER 15

POLLUTION PREVENTION

SECTION 2: MARINE CORPS POLICY

15200. GENERAL. The Marine Corps will employ P2 to eliminate or minimize environmental and other life-cycle costs and to reduce or eliminate the generation of pollution. Where cost-effective, Marine Corps installations must implement source separation for recycling and develop a single authorized QRP. See chapters 3 and 17 of this Manual for more information on QRPs.

15201. PROCEDURES. To achieve P2 goals and accomplish the provisions outlined in DOD policy, Marine Corps installations will align and integrate P2 into appropriate elements of the Marine Corps EMS, and:

1. Implement and maintain HCPs in accordance with the HCP Implementation Guide to reduce the amount of HM used and HW generated by up-front HM control in procurement, supply, and use. The HCP strives to reduce the amount of HM used and HW generated through HM life-cycle control and the management of HM. The goals of the HCP are to reduce unnecessary risks and costs associated with the disposal of excess or expired shelf-life HM, protect the environment, ensure safety, and enhance readiness. The HCP employs sound HM management practices, including establishing and enforcing HM AULs.
2. Establish methods for substituting less or non-HM whenever possible.
3. Develop and incorporate new technology or materials that have a reduced impact upon the environment, are safer and healthier, or result in reduced emissions.
4. Promote the use of environmentally preferable products and services.
5. Emphasize P2, including improvements in energy and resource use, as the alternative of "first choice" in achieving compliance with applicable environmental requirements and E.O.s.
6. Incorporate P2 at installations by seeking, identifying, planning, implementing, and reviewing P2 solutions for all activities across the installation with real or potential impacts to the environment and other sensitive resources.
7. Incorporate P2 at installations into all phases of acquisition, operations, maintenance, support, and the ultimate disposal of weapon systems over the system life-cycle.
8. Instill knowledge and understanding in all personnel (military and civilian) across the installation of P2 requirements through comprehensive education, training, career development, and awareness programs. The potential benefits of a cost-effective P2 program (including a reduced compliance burden, reduced costs of compliance, improved health and safety of personnel and the environment, and, ultimately, enhanced mission capability) accrue to all installation organizations and personnel. Effective P2 programs rely on input from, and the cooperation and coordination of, all organizations and personnel.

9. Promote P2 through positive relations and partnerships with Federal, state, Native American tribal, and local government officials, as well as host country, nongovernmental organizations, and other private and public stakeholders.
  10. Develop, demonstrate, and implement innovative P2 technologies and business practices.
  11. Use the EMH to develop solutions to environmental compliance issues.
  12. Reduce weapons systems life-cycle cost by avoiding the use of HM.
  13. Plan, program, and budget to achieve these policies, using the environmental quality classes (defined in chapter 3 of this Manual) to prioritize environmental projects for funding and the following DOD definitions for environmental compliance and P2:
    - a. Environmental compliance includes all activities and projects that utilize end-of-pipe treatment or disposal methods to meet applicable environmental requirements.
    - b. Compliance-type requirements that are satisfied by source reduction (pollution elimination or reduction), pollutant minimization, or recycling approaches are P2 requirements and shall be funded as "P2."
  14. Ensure, where cost effective, that all installations and activities have, or participate in, QRPs, and that these recycling programs are available to serve all host and tenant organizations occupying space on the installation, including leased space. See chapters 3 and 17 of this Manual for more information on QRPs.
  15. Ensure that P2 planning activities are conducted in coordination with planners from other functional organizations at the installations (including, but not limited to, facilities, logistics, and health and safety).
  16. Identify, plan, design, implement, and monitor cost effective P2 solutions to promote the Marine Corps' policy of continual improvement in its environmental compliance and protection program.
  17. Monitor new construction and renovation projects to ensure Sustainable Building Practices, which include consideration of P2, are incorporated into design, construction, and maintenance activities in accordance with reference (c).
15202. TRAINING. Marine Corps installations must provide specific and general awareness P2 training, as appropriate to successfully integrate P2 into all functional areas. At a minimum, general awareness training should encourage all members of the Marine Corps to participate in P2 activities and programs. Examples of specific P2 training include training in reference (a), TRI reporting, GP, and P2 planning and implementation, to include, for example, housekeeping practices, process modifications, or how to conduct a pollution prevention opportunity assessment (PPOA). P2 training needs and activities shall be integrated into the CETEP, as described in chapter 5 of this Manual.

15203. PLANNING

1. All Marine Corps installations are required to have a P2 plan that addresses the necessary installation actions for reducing pollution from all sources and to all media. Installation P2 plans must be developed in accordance with applicable regulatory requirements and the Marine Corps Pollution Prevention Planning Guide, and fully integrated with, and implemented through, the appropriate elements and procedures of the Marine Corps EMS to ensure a consistent approach and avoid potential duplication of effort. The P2 plan may be a stand-alone management plan which aligns with the EMS Manual or it may be incorporated into the relevant elements and terminology of the installation EMS Manual. The plan should be reviewed at least annually as part of the EMS management review, and updated as appropriate. The P2 plans should include pollution information for the baseline years, PPOAs, investment strategies, and P2 techniques such as HM consolidation, recycling, improved control technologies, and material sharing programs. Plans should be based on a comprehensive understanding of total chemical use at the installation and of mission-supporting activities undertaken across the installation that may impact the environment and/or other sensitive resources. The P2 plan should incorporate or reference other required plans related to P2 or pollution reduction, for instance: a HW minimization plan, a storm water P2 plan, a SW management plan, and an ODS phase-out plan.

2. Investment/implementation options selected in the P2 plans should be evaluated in consideration of prioritization criteria consistent with the Marine Corps EMS and reflect the following priorities:

- a. Life-cycle cost-effectiveness.
- b. Compliance (e.g., those P2 projects that help achieve or maintain compliance will receive high priority).
- c. Ranking in the EMH (e.g., source reduction is preferable to recycling).
- d. Achieving Marine Corps P2 goals, and EMS objectives and targets.
- e. Ease of implementation.
- f. Proven technologies.

15204. COMPLYING WITH EPCRA SECTION 313. All Marine Corps installations in the customs territory of the United States must comply with section 313 of reference (a) in accordance with DOD policy and guidance, available from the Defense Environmental Network Information Exchange (DENIX) website.

1. TRI Report Submittals. All Marine Corps installations required to submit a TRI Report Form R to EPA, must use the EPA TRI reporting software to prepare electronic format submittals. A copy of the TRI Report Form R electronic format submittals shall be provided to the CMC (LF) concurrent with their submission to EPA. Report Control Symbol, DD-5090-04, is assigned to this reporting requirement.

2. Other EPCRA Requirements. Marine Corps policy and planning for ensuring compliance with sections 301-304 and 311-312 of reference (a) are described

in chapter 7 of this Manual.

15205. P2 APPROACH TO COMPLIANCE

1. Background. Rising costs and other considerations have compelled the Marine Corps to reevaluate its approach to compliance. Traditionally, environmental projects have focused on costly end-of-the-pipe solutions (i.e., treatment or disposal). Implementing a philosophy promoting the use of P2 techniques as the preferred manner of obtaining and maintaining environmental compliance will help reduce the life-cycle cost of environmental compliance while meeting current and future compliance requirements.

2. Project Reviews. Projects that contribute to the Marine Corps goal of increasing P2 investments to meet compliance requirements will have high funding priority.

15206. OUTREACH

1. Policy. Marine Corps installations should aggressively seek out new partners and strengthen existing relationships outside the Marine Corps, including industries, regulators, universities, communities, and nongovernmental organizations. The goals of such partnerships are to share information technologies and to inform and educate those partners about Marine Corps efforts to increase P2 investments and to meet all applicable compliance requirements.

2. Guidance. Guidance for seeking partnerships and relationships is included in the Marine Corps Pollution Prevention Planning Guide.

CHAPTER 15

POLLUTION PREVENTION

SECTION 3: RESPONSIBILITIES

15300. CMC (LF)/COMMANDER MCICOM

1. Develop and implement Marine Corps P2 policy and guidance, implement applicable P2 requirements, and align and integrate P2 into appropriate elements of the Marine Corps EMS.
2. Identify P2 opportunities that can be implemented at some or all Marine Corps installations and facilitate the transfer of P2 technology throughout the Marine Corps.
3. Develop and maintain installation P2 planning guidance.
4. Promote the development of P2 technologies and tools, and assist in the implementation of P2 efforts at Marine Corps installations.
5. Program, budget, allocate, and prioritize funds for facility installation P2 projects based on life-cycle cost and environmental compliance criteria and in accordance with DOD guidance and fiscal policies.
6. Track the progress of the Marine Corps in achieving P2 goals.
7. In conjunction with the Office of the Assistant Secretary of the Navy, Research, Development and Acquisition, develop cooperative and commercially proven solutions for environmental facilities or services (in the United States and overseas) where economically advantageous and consistent with mission requirements. Include the use of acquisition authority and cross-service agreements in accordance with the DOD policy on mutual logistic support as appropriate.
8. Develop and implement a methodology whereby installations and commands employ the EMH and life-cycle cost considerations in developing environmental projects.
9. Coordinate with Marine Corps organizations/commands, including the CMC Logistics, Plans, Policies, and Strategic Mobility (LP), CMC Safety Division (SD); MCCDC Quantico; and Marine Corps Systems Command (MARCORSYSCOM) in reviewing material substitution opportunities.
10. Provide support to Marine Corps installations and Marine Corps commands/units and tenants by assisting in the interpretation of and compliance with Federal, State, local, and overseas P2 program regulatory requirements to ensure consistent application of Marine Corps policy as set forth in this Manual.

15301. CMC (LP)

1. Issue and institutionalize concepts of the Marine Corps HCP for centralized management and control of HM at the command, installation, or activity level, with the objectives of minimizing HM inventories and maximizing the reutilization of HM. Ensure that the HCP concept is

incorporated into reference (x), and that this Manual on HM is widely publicized.

2. As a management tool for implementing an installation HCP, promote the use of automated HM and HW tracking and environmental reporting software, and ensure that interfaces are developed, as appropriate, between all HM management, environmental reporting, and supply and logistics systems.

3. Ensure Marine Corps HM management policies incorporate HCP concepts and procedures, including applicable HM shelf-life management requirements, and ensure implementation by commands, installations, and activities are effective, in accordance with reference (y).

4. Coordinate with the CMC (LF), CMC (SD), MCCDC Quantico, and MARCORSYSCOM in reviewing material substitution opportunities.

15302. CMC (SD). Coordinate with the CMC (LF), CMC (LP), and MARCORSYSCOM in reviewing material substitution opportunities, as appropriate.

15303. MCCDC QUANTICO

1. The Director, Doctrine Division (C 42), must incorporate P2 practices and the HCP concepts and procedures into doctrine applicable to the supporting elements.

2. The Director, Training and Education Division (C 46), must incorporate P2 practices to include source reduction initiatives and the HCP concepts and procedures into appropriate Marine Corps ITS.

3. The Director, Requirements Division (C 44), must incorporate P2 practices into combat service support requirement formulations and ensure that the use of HM, if a valid requirement, is supported and justified in mission need statements or operational requirement documents.

15304. COMMANDER MARCORSYSCOM, CMC (LP)

1. Develop policy and guidance for ensuring that P2 is incorporated and that P2 considerations are integrated into all acquisition phases and across the entire life-cycle (from concept exploration through system demilitarization and disposal) of all weapons systems acquisition programs, in accordance with the DOD specifications described in reference (o). P2 activities for fielded weapon systems not included within the scope of an active acquisition program must be conducted in accordance with appropriate DOD policy.

2. Ensure that all Program Executive Officers and Program Managers incorporate P2 into all phases of weapon system acquisition (life-cycle) management, and that all acquisition personnel receive appropriate P2 acquisition education and training.

3. Develop and implement Marine Corps policy and guidance for integrating P2 requirements into all aspects of the Marine Corps Acquisition Programs.

4. Develop and implement HM elimination, reduction, or substitution processes for all systems and operations under their cognizance. These processes must include the identification, evaluation, and use of environmentally preferable materials and services that meet the government's

needs.

5. Develop and implement a GP and acquisition program in accordance with references (d) and (g).

6. Revise all Marine Corps-owned standardized documents that have been designated for retention to eliminate, or reduce HM references and/or to replace those references with less HM to the extent technically feasible and consistent with mission requirements.

7. Establish methods to minimize or eliminate new HM entry into the supply system through a review of specifications, standards, commercial item descriptions, purchase descriptions, and supply support requests, etc. Coordinate with the preparing activity to maximize the elimination of HM requirements in the aforementioned documents.

8. If non-HM substitutes do not exist, maximize the use of substitutes with the least hazardous characteristics to protect human health and minimize potential environmental impacts.

9. Ensure that an MSDS is obtained and reported for all HM acquisitions, procurements, or re-procurements.

15305. CG MARINE CORPS EAST, WEST, AND PACIFIC. CGs of Marine Corps Regional Commands shall:

1. Promote P2 and support installation P2 initiatives, and share success stories across installations within the Region and across Regions.

2. Implement regional P2 strategies and identify regional priorities to address P2 opportunities and environmental and compliance risks.

3. Identify and promote opportunities for regional environmental initiatives and contracting support to gain efficiencies. Create environmental program efficiencies by collectively funding studies, coordinating common training programs, developing appropriate Memorandums of Agreement between stakeholders (e.g., Marine Corps TECOM bases, Marine Aircraft Wings, Resident Officer In Charge of Construction offices, etc.) and the Region, and facilitating mutual support between installations as practicable.

15306. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES.

1. Develop and implement a P2 program and plan in accordance with applicable regulatory requirements and the Marine Corps Pollution Prevention Planning Guide. Align and integrate the P2 program and plan with appropriate elements of the installation EMS. Support evaluations that assess the degree to which P2 policies and goals are successfully implemented and accomplished.

2. Establish and implement procedures to control and manage HM using methods to track and minimize the types, variety, and quantities of HM procured, stored, used, and ultimately disposed, via an HCP. HCP management procedures must include centralized HM information management and material reutilization, development, and enforcement of an HM AUL to prevent unauthorized HM procurement and use and centralized HM storage and issuance to an extent which does not inhibit or conflict with installation or activity mission requirements. HCP goals include reducing unnecessary risks and costs

from HM shelf-life expiration, protecting the environment from the disposal of excess or overage HM, and enhancing worker safety and ultimately mission readiness.

3. Comply with all applicable EPCRA requirements.
4. Evaluate P2 decisions by economic analysis techniques, matching the magnitude of the decision being made and considering cost and intangible factors, as applicable, and in accordance with the installation EMS.
5. Employ the EMH and life-cycle cost analysis as environmental project planning tools, with a particular focus on developing P2 solutions to environmental compliance issues, i.e., PACE. Life-cycle cost analysis should be commensurate with project scope, compliance significance, and potential environmental benefit; should be assessed and initiated at the earliest instance and updated when appropriate; and must be provided as an exhibit to support environmental project budget submissions.
6. Provide specific and general awareness training to support P2 program objectives using the CETEP.
7. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with P2 requirements, submitting project documentation and funding requests to the CMC (LF).
8. Monitor new construction and renovation projects to ensure Sustainable Building Practices, which include consideration of P2, are incorporated into design, construction, and maintenance activities, and applicable environmental quality standards are met, in accordance with reference (c).

REFERENCES

- (a) 42 U.S.C. 11001 et seq.
- (b) 42 U.S.C. 6601 et seq.
- (c) Executive Order 13423, "Strengthening Federal Environmental, Energy and Transportation Management," January 24, 2007
- (d) Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007
- (e) Public Law 102-386, "Federal Facilities Compliance Act of 1992," October 6, 1992
- (f) 42 U.S.C. 9601-9675
- (g) 42 U.S.C. 6901 et seq.
- (h) 42 U.S.C. 7401 et seq.
- (i) Public Law 109-58, "Energy Policy Act of 2005," August 8, 2005
- (j) Public Law 110-140, "Energy Independence and Security Act of 2007," December 19, 2007
- (k) 42 U.S.C. 300f et seq.
- (l) 33 U.S.C. 1251 et seq.
- (m) Executive Order 12948, "Amendment to Executive Order No. 12898," January 30, 1995
- (n) MCO 5090.1
- (o) DOD Directive 5000.01, "The Defense Acquisition System," May 12, 2003
- (p) DOD Directive 4715.1E, "Environment, Safety, and Occupational Health (ESOH)," March 19, 2005
- (q) DOD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (r) 42 U.S.C. 6374

(s) 29 CFR 1910

(t) 49 CFR 173

(u) 40 CFR 261

(v) 42 U.S.C. 11023

(w) 40 CFR 372

(x) MCO P4450.12A

(y) MCO 4450.13A

CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

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CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

SECTION 1: INTRODUCTION

16100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for the protection and conservation of drinking water and irrigation water resources.

16101. APPLICABILITY. See paragraph 1101 regarding applicability of Federal, state, and local laws, regulations, and ordinances to USMC active and reserve installations and activities.

16102. BACKGROUND

1. Congress first enacted reference (a) in 1974 as an amendment to reference (b). Significant revisions to reference (a) were enacted in 1986 and 1996. Under reference (a), the EPA sets Federal standards for public water systems (PWSs) to provide safe drinking water to its consumers. In addition, reference (a) protects drinking water sources via Source Water Protection (SWP) (which includes wellhead and surface water protection) and Underground Injection Control (UIC) Program requirements. In 2002, reference (a) was amended by reference (c) to require certain PWSs to perform Vulnerability Assessments (VAs) and prepare or update ERPs. States and local authorities may also dictate drinking water standards that can be more stringent than Federal requirements. The Navy and DOD set drinking water policies that may also apply to Marine Corps water systems. The 1996 amendments to reference (a) waived sovereign immunity for the payment of fines and penalties imposed by Federal, state, or local agencies for violations (reference (d)). Additionally, EPA may assess administrative penalties of up to \$25,000 per day per SDWA violation.

16103. FEDERAL STATUTES

1. SDWA of 1974, as Amended in 1986 and 1996 (42 U.S.C. sections 300(f)-300(j)). The major provisions of the SDWA establish requirements for:

a. National Primary Drinking Water Regulations (NPDWRs) for contaminants that may have an adverse effect on human health, and National Secondary Drinking Water Regulations (NSDWRs) for contaminants that may adversely affect the aesthetic qualities of drinking water. NPDWRs are Federally enforceable, while NSDWRs are intended to be used by states as guidelines.

b. Water system monitoring, reporting, recordkeeping, public notification, and operator certification.

c. Unregulated contaminant monitoring and regulatory determination.

d. Protecting underground sources of drinking water via a UIC Program, Sole Source Aquifer designations, state Wellhead Protection (WHP) Programs, and state Source Water Assessment Programs (SWAPs). The SDWA also required EPA to develop water conservation plan guidelines for various sizes of PWSs. The Federal regulations that implement the majority of SDWA requirements can be found in Title 40 CFR, parts 141 through 149.

2. EPACT of 1992 (Public Law 102-486)

a. This Act amended and updated the Energy Policy and Conservation Act and the National Energy Conservation Policy Act. The statements of purpose were revised to include a policy on water conservation.

b. Relevant statutory requirements of EPACT include:

(1) Section 123 establishes maximum water use standards for plumbing fixtures.

(2) Section 152 requires Federal agencies to install in Federal buildings owned by the United States, all energy and water conservation measures with payback periods of less than 10 years.

(3) Section 152 also authorizes Federal agencies to participate in programs established for water conservation. Additionally, it encourages Federal agencies to enter into negotiations with water utilities to design cost-effective water demand management and conservation incentive programs to address the unique needs of facilities used by these agencies.

3. Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188). Sections 401 through 403 of this Act amended the SDWA to protect drinking water systems from terrorist attacks and other intentional acts.

a. Section 401 requires all community water systems (CWSs) serving more than 3,300 people to conduct water system VAs and develop or revise ERPs accordingly.

b. Section 402 requires EPA to review current and future methods to prevent, detect, and respond to the intentional introduction of chemical, biological, or radiological contaminants into CWSs and its water sources.

c. Section 403 significantly increases the fines and penalties under the SDWA for tampering with PWSs.

4. E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, January 24, 2007. E.O. 13423 requires Federal agencies to reduce water consumption intensity through life-cycle cost effective measures. Federal agencies are required to reduce water consumption by certain percentages by fiscal year (FY) 2015.

5. E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, October 8, 2009. E.O. 13514 requires Federal agencies to reduce potable water consumption intensity by a certain percentage by 2020 through water management and reuse strategies. E.O. 13514 also requires Federal agencies to reduce industrial, landscaping, and agricultural water consumption by fiscal year (FY) 2020. In order to meet these and other goals, the E.O. requires Federal agencies to consider several options, including:

a. Implementing water management strategies such as water-efficient and low-flow fixtures and efficient cooling towers.

b. Identifying, promoting, and implementing strategies that reduce

potable water consumption and are consistent with state law.

c. Designing and constructing high-performance buildings that minimize the consumption of energy, water, and materials.

d. Procuring water-efficient products.

#### 16104. REQUIREMENTS

1. General. Marine Corps water systems must comply with all applicable Federal, state, and local drinking water laws and regulations, and related Navy and DOD policies. Federal, state, and local drinking water requirements generally apply to PWSs, but do not apply to non-PWSs. A PWS is a system that provides piped water for human consumption and has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. A PWS can be further classified as a CWS, nontransient noncommunity water system (NTNCWS), or transient noncommunity water system (TNCWS) (see Figure 16-1). SDWA requirements for a PWS are dependent on system classification, population served by the system, and/or source water type (i.e., ground water, surface water, or ground water under the direct influence of surface water (GWUDI)). EPA sets primary drinking water standards known as NPDWRs for PWSs. These NPDWRs apply to most Marine Corps PWSs with the exception of consecutive PWSs that meet all of the following four criteria (section 3 of reference (e)):

a. Consists only of distribution and storage facilities (and does not have any collection and treatment facilities).

b. Obtains all of its water from, but is not owned or operated by, a PWS subject to reference (e).

c. Does not sell water to any person.

d. Is not a carrier which conveys passengers in interstate commerce.

e. Although these consecutive PWSs are not subject to reference (e), states may establish monitoring requirements for these systems (section 29 in reference (e)). Marine Corps PWSs and activities must also meet other applicable SDWA requirements, including those for UIC, SWP, and VAs/ERPs.

2. Regulatory Requirements. This section summarizes the relevant implementing regulations of reference (a) found in references (e) and (f).

a. NPDWRs, Reference (e). Reference (e) contains legally enforceable drinking water standards that generally apply to PWSs. NPDWR standards are established for the following groups of contaminants: inorganic chemicals, organic chemicals, microorganisms, disinfectants, disinfection byproducts (DBPs), and radionuclides. For each contaminant, EPA sets a maximum contaminant level (MCL), action level (AL) for lead and copper, maximum residual disinfectant level (MRDL) for disinfectants, or treatment technique (TT). Reference (a) also requires EPA to establish non-enforceable maximum contaminant level goals (MCLGs) for contaminants, or in the case of disinfectants, maximum residual disinfectant level goals (MRDLGs). A table listing all contaminants and standards can be viewed at <http://www.epa.gov/safewater/mcl.html>. In addition to MCLs, ALs, MRDLs, TTs, and associated contaminant level goals, reference (e) specifies monitoring,

reporting, and recordkeeping requirements for each contaminant or group of contaminants.

(1) Arsenic Rule (reference (g)). In January 2001, EPA reduced the standard for arsenic from 50 ppb to 10 ppb. Marine Corps CWSs and NTNCWSs are required to comply with this standard and must incorporate specific health effects language in annual Consumer Confidence Reports (CCRs).

(2) Radionuclides Rule (reference (h)). In December of 2000, EPA updated standards for radionuclides in drinking water and set a new standard for uranium. The MCLs for these radionuclides are: combined radium 226/228 (5 picocuries per liter (pCi/L)); beta emitters (4 mrems); gross alpha standard (15 pCi/L); and uranium (30 micrograms per liter ( $\mu\text{g/L}$ )). These standards apply only to CWSs.

(3) Microbial and DPB Rules

(a) Surface Water Treatment Rule (SWTR) (sections 70 through 75 of reference (e)). The primary objective of this rule is to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires all PWSs using surface water or GWUDI (collectively referred to as subpart H systems) to filter and disinfect source waters. Under certain criteria, the filtration requirement can be waived; however, there are no exceptions to the disinfection requirement. The SWTR established MCLGs for viruses, bacteria, and Giardia lamblia and TTs for filtered and unfiltered systems.

(b) Total Coliform Rule (TCR) (reference (i)). The TCR requires all PWSs to monitor for the presence of total coliforms in the distribution system. Total coliforms are used as an indicator for microbial pathogens and help to determine the adequacy of water treatment and the integrity of the distribution system. The presence of total coliforms in the distribution system indicates that fecal pathogens may be present. The TCR specifies a minimum routine monitoring frequency depending on the population served. The TCR also specifies the maximum number of samples in which total coliforms may be detected each month without triggering the additional testing requirements outlined in Section 21 of reference (e). Systems required to collect 40 or fewer samples per month must conduct additional monitoring if more than one sample tests positive. Systems required to collect over 40 samples per month must conduct additional monitoring if more than five percent of samples test positive.

(c) Interim Enhanced Surface Water Treatment Rule (IESWTR) (reference (j)). This rule strengthens microbial protection by minimizing levels of Cryptosporidium in finished water. It also includes provisions to ensure that reduction of DBPs in the water system does not compromise microbial protection. The IESWTR applies to subpart H systems that serve at least 10,000 people. Under this rule, filtered systems have tighter TTs and unfiltered systems have watershed control requirements for Cryptosporidium. The IESWTR also requires states to conduct sanitary surveys for subpart H systems of all sizes.

(d) Stage 1 Disinfectants and DBPs (D/DBP) Rule (reference (k)). This rule reduces exposure to several D/DBP and applies to all CWSs and NTNCWSs that use a chemical disinfectant in any part of their system. MRDLs are established for the disinfectants chlorine, chloramine and chlorine

dioxide, while MCLs are established for DBPs including total trihalomethanes (TTHMs), five haloacetic acids (HAA5), chlorite, and bromate. This rule also requires subpart H water systems that use conventional filtration treatment to remove specified percentages of organic materials (measured as total organic carbon) which may react with disinfectants to form DBPs. Removal must be achieved through a TT, unless a system meets alternative criteria.

(e) Filter Backwash Recycling Rule (FBRR) (reference (l)). This rule is intended to prevent microbes, such as Cryptosporidium, from passing through treatment systems and into finished drinking water during recycling practices. The FBRR applies to all subpart H systems that use direct or conventional filtration processes and recycle spent filter backwash water, sludge thickener supernatant, or liquids from dewatering processes. The FBRR requires that spent filter backwash water, thickener supernatant, and liquids from dewatering processes are returned to a location such that all processes of a system's conventional or direct filtration are employed. Affected systems may apply to the state for approval to recycle at an alternate location.

(f) Long-Term 1 Enhanced Surface Water Treatment Rule (ESWTR) (reference (m)). This rule extends the requirements under the IESWTR to subpart H systems that serve less than 10,000 people. Similar to the IESWTR, the Long-Term 1 ESWTR increases protection against Cryptosporidium and other disease-causing microbes and addresses risk trade-offs with reducing DBPs.

(g) Long-Term 2 ESWTR (reference (n)). In January 2006, EPA published the Long-Term 2 ESWTR to supplement prior surface water treatment rules by further reducing Cryptosporidium in drinking water systems. The rule targets highly vulnerable surface water systems, requiring these systems to further reduce Cryptosporidium levels in drinking water through treatment. Like prior SWTRs, the Long-Term 2 ESWTR applies to all subpart H systems and addresses risk trade-offs with the control of DBPs. It does not apply to consecutive water systems that purchase all of their water from a PWS regulated under reference (e).

(h) Stage 2 D/DBP Rule (reference (o)). EPA published the Stage 2 D/DBP Rule to further reduce DBP levels in the distribution system. The Stage 2 DBPR is designed to reduce peak DBP levels in the distribution system. This is accomplished via changes in compliance monitoring locations and in compliance calculations for TTHM and HAA5. The existing MCLs for TTHM (80 µg/L) and for HAA5 (60 µg/L) remain the same under the Stage 2 DBPR. The rule applies to CWSs and NTNCWSs that add a disinfectant (other than ultraviolet light (UV)) or that deliver water that has been treated with a disinfectant (other than UV).

(i) Ground Water Rule (GWR) (reference (p)). EPA published the GWR to reduce the risk of exposure to fecal contamination that may be present in PWSs that use ground water sources. The rule applies to all ground water systems and uses a risk-targeted strategy to identify ground water systems that are at high risk for fecal contamination. The rule also specifies when corrective action (which may include disinfection) is required to protect consumers from bacteria and viruses. There are four major requirements of the GWR:

1. Periodic sanitary surveys performed by states.

2. Source water monitoring performed by PWSs.

3. Corrective action for systems with a significant deficiency or source water fecal contamination (as determined by the sanitary surveys or monitoring results).

4. Compliance monitoring to ensure the reliability of treatment technologies.

(4) Radon Proposed Rule (reference (q)). In November 1999, EPA proposed regulations to protect people from exposure to radon. As proposed, the rule would use a multimedia approach to reduce radon risks in indoor air, while protecting public health from the highest levels of radon in drinking water. EPA is proposing an alternative maximum contaminant level (AMCL) of 4000 pCi/L for radon-222 in drinking water and requirements for multimedia mitigation (MMM) programs to address radon-222 in indoor air. EPA is also proposing a more stringent radon MCL of 300 pCi/L in states that choose not to implement a CWS MMM program. CWSs may comply with the less stringent AMCL if they are located in states that develop an EPA-approved MMM program, or in the absence of a state program, develop a state-approved CWS MMM program.

(5) Lead and Copper Rule (LCR) (reference (r)). The LCR was developed to reduce lead and copper levels at consumers' taps, primarily through corrosion control. LCR requirements are codified in subpart I of reference (e). Under the LCR, Marine Corps CWSs and NTNCWSs are required to conduct routine lead and copper monitoring and perform additional requirements, as triggered by a lead and copper exceedance. A lead and copper exceedance triggers additional water quality parameter and source water monitoring. Based on monitoring results, systems may be required to install corrosion control treatment and/or perform source water treatment. A lead AL exceedance also triggers public education requirements. Should prescribed treatment options fail to bring levels below the ALs, lead service lines may require replacement. The lead and copper AL is exceeded if the concentration of lead or copper in more than 10 percent of tap water samples collected during any monitoring period is greater than 0.015 milligrams per liter (mg/L) lead or 1.3 mg/L copper, respectively. In January 2000 and October 2007, EPA published revisions to the LCR (references (s) and (t)). Minor revisions were made in January 2000 to streamline LCR requirements, promote consistent national implementation, and reduce the reporting burden for water systems. It did not change the basic requirements of the LCR. The October 2007 revisions changed the following LCR requirements:

(a) Monitoring. Prevents systems above the lead AL from remaining on a reduced monitoring schedule.

(b) Water treatment. Requires systems to provide advanced notice and obtain primacy agency approval for planned changes to the source water or treatment process.

(c) Public awareness and education. Changes the content and delivery method/timeframe for public education material and incorporates educational statements on lead in annual CCRs. Also requires systems to notify consumers of tap water monitoring results.

(d) Lead service line replacements. Requires systems to re-test previously "tested-out" lines when resuming lead service line replacement

programs.

(6) Prohibition on Lead Pipes, Solder, and Flux. In addition to the LCR, subpart E of reference (e) prohibits the use of lead pipe, solder, or flux in the installation or repair of any PWS or any plumbing in residential or nonresidential facilities providing water for human consumption. Solders and flux are considered to be lead free if they contain less than 0.2 percent lead; pipes and fittings are considered to be lead free if they contain less than 8.0 percent lead.

(7) Unregulated Contaminant Monitoring Rule (UCMR) (references (u), (v), and (w)). Reference (d) requires that, at least once every five years, EPA issue a list of unregulated contaminants to be monitored by certain PWSs (sections 300g-1 and 300j-4 of reference (a)). EPA uses the data generated from this monitoring effort to determine whether a particular contaminant(s) requires drinking water standards. Standards and criteria for monitoring unregulated contaminants are established through the UCMR. Generally, Marine Corps CWSs and NTNCWSs serving more than 10,000 people (large systems) and a representative sample of small CWSs and NTNCWSs (as selected by EPA) are required to monitor for the presence of unregulated contaminants and report results to EPA.

(8) Public Notification Rule (PNR) (reference (x)). The PNR is codified in subpart Q of reference (e) and requires all PWSs to notify consumers of violations related to contaminant MCLs, MRDLs, TTs, monitoring requirements, or testing procedures. Public notices are also used to announce the availability of UCMR monitoring results and any variances or exemptions issued to the PWS. The PNR establishes three tiers of public notices based on the severity of a violation. A Tier 1 public notice must be issued within 24 hours for violations that pose acute health risks due to short-term exposure. A Tier 2 notice is issued within 30 days for other violations and situations that may pose a serious, but not immediate adverse health effect. A Tier 3 notice is required within one year for violations and situations not included under Tier 1 or 2.

(9) CCRs. Subpart O of reference (e) requires CWSs to prepare and provide to their consumers annual reports on the quality of the water delivered by the system. The reports must be delivered by July 1 each year and contain data collected during, or prior to, the previous calendar year. CCR requirements, including report contents, health effects language for certain contaminants, and delivery requirements, are outlined in section 151 in reference (e). Note: Marine Corps facilities overseas are not required to submit CCRs.

(10) Reporting Requirements. Reference (e) requires PWSs to report to the state, all required testing and analytical results within the shorter of the time frames below (section 31 of reference (e)). Reporting requirements for lead and copper are specified under section 90 of reference (e).

(a) The first 10 days following the month in which the result is received.

(b) Within the first 10 days following the end of the required monitoring period, as stipulated by the state.

(11) Recordkeeping Requirements. The NPDWR also requires PWSs to maintain the following records (section 33 in reference (e)):

(a) Microbiological and turbidity analyses and required monitoring plans per reference (y), SSIC 5090.1a and b.

(b) Chemical analyses and required monitoring plans per reference (y), SSIC 5090.1b.

(c) Records of actions taken to correct NPDWR violations.

(d) Copies of reports, summaries, or correspondence related to sanitary surveys.

(e) Records of variances or exemptions granted to the system.

(f) Copies of public notices issued and certifications of notices. Records mentioned in paragraph 16104.2a(11)(c) through (f) must also be retained per reference (y), SSIC 5090.4.

(g) Recordkeeping requirements for lead and copper can be found in section 91 of reference (e). These records must also be retained per reference (y), SSIC Code 5090.5. Marine Corps installations must provide copies of required records to EPA or state as per applicable regulations.

(12) Use of Non-Centralized Treatment Devices. Subpart J of reference (e) specifies the criteria and procedures that PWSs must comply with before they can use point-of-entry treatment devices to achieve compliance with any MCL. Subpart J also prohibits PWSs from using bottled water to achieve compliance with any MCL. Bottled water may be used only on a temporary basis to avoid an unreasonable risk to human health.

b. NSDWRs, reference (z). Reference (z) establishes secondary MCLs and monitoring requirements for contaminants that may affect the taste, odor, or appearance of drinking water. These regulations are not federally enforceable, but are intended as guidelines for states that may promulgate their own regulations. Each Marine Corps installation should contact their respective state to determine whether the state has enforceable secondary MCLs. If the state enforces reference (z), then Marine Corps activities shall comply. A table listing all NSDWR contaminants and standards can be viewed at <http://www.epa.gov/safewater/mcl.html>.

c. UIC Program, references (aa) through (ab). The UIC Program controls the injection of wastes via a UIC well into ground water. An injection well is a bored, drilled, or driven shaft; a dug hole; or an improved sinkhole that is deeper than it is wide and is used to emplace fluids beneath the earth's surface.

(1) There are five classes of UIC wells covered under the UIC Program. A description of these well classes can be found at <http://www.epa.gov/OGWDW/uic/wells.html>. Class V wells are the types most commonly found at Marine Corps installations. Examples of Class V wells include certain septic system wells and cesspools, storm drainage wells, dry wells used for waste disposal, and heat pump wells used to circulate groundwater for heating office buildings. These types of wells are generally authorized by rule (section 24 of reference (aa)), provided that Marine Corps installations submit inventory information and comply with all other

applicable UIC conditions (section 84 of reference (aa)). However, all Class V large-capacity cesspools (serving 20 or more people per day) and Class V motor vehicle waste disposal wells in a ground water protection area or sensitive ground water area are banned.

(2) Prohibitions. Federal requirements prohibit any underground injection of fluids, except as authorized by permit or rule issued under the UIC Program (section 11 of reference (aa)). UIC regulations also prohibit owners or operators from constructing, operating, maintaining, converting, plugging, abandoning, or conducting any injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any NPDWR or adversely affect human health (section 12 of reference (aa)). Generally, the new construction of a Class IV (HW) well is prohibited and any increase in the amount of HW or change in HW type injected into an existing Class IV well is also prohibited (section 13 of reference (aa)).

d. Sole Source Aquifer Designation, reference (f). Part 149 provides the criteria for identifying and designating critical aquifer protection areas. All Federal projects proposed on a designated sole source aquifer area are subject to EPA review to ensure that these projects do not result in, or contribute to, conditions which would create a significant hazard to public health (see reference (ac)).

### 3. Statutory and E.O. Requirements

#### a. Water Conservation Program

(1) The EPACT requires Federal agencies to install in government-owned buildings, water conservation measures with payback periods of less than 10 years. Consequently, Marine Corps installations must include these measures in the designs of all quarters and building MILCON, repair, and rehabilitation projects.

(2) Reference (ad) requires Federal agencies to reduce water consumption intensity through life-cycle cost-effective measures by two percent annually through the end of FY 2015 or 16 percent between FYs 2008 and 2015.

b. Operator Certification. Reference (d) requires states to develop operator certification programs (section 300g-8 of reference (a)). Specifically, these programs must establish minimum standards for certification and re-certification of CWS and NTNCWS operators.

c. Water System VAs. Reference (c) required CWSs serving more than 3,300 people to conduct a water system VA and prepare or revise ERPs, based on the results of the VA. Although the dates for completing these VAs have passed, the DOD and Navy have set policies for all other PWSs to conduct VAs and prepare/update ERPs (see paragraph 16207 of this document).

d. SWP. Reference (d) required states to submit SWAPs to EPA for approval (section 300j-13 in reference (a)). A state SWAP delineates SWP areas, inventories significant contaminants in these areas, and determines the susceptibility of each public water supply to contamination. Prior to

reference (d), states were required to develop WHP Programs to protect wellhead areas from contamination (section 300h-7 in reference (a)). The WHP Program may be used as a basis for the state SWAP (section 300j-13 in reference (a)). A state may require a Marine Corps PWS that uses ground water to develop its own WHP area to protect ground water supply. Section 1428(h) of reference (a) requires all Federal agencies, having jurisdiction over any potential source of contaminants identified by a state WHP program to comply with all requirements of the state and local programs.

4. Other Requirements. State primacy agencies also oversee water system cross-connection control programs to ensure compliance with primary and secondary drinking water standards. Cross-connections are the links through which contaminants can enter a potable system and apply to building interior domestic plumbing systems, fire protection plumbing systems, and exterior water distribution systems. State programs for cross-connection control set policy, procedures, and instructions, for installing, repairing, maintaining, inspecting, and testing backflow preventers.

#### 16105. TERMS AND DEFINITIONS

1. AL. The concentration of lead or copper in water specified in section 80(c) of reference (e) that determines, in some cases, the treatment requirements that a water system must meet to control lead and copper (reference (e)).

2. Aquifer. A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring (reference (f)).

3. CWS. A PWS which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents (reference (e)).

4. Consecutive System. A PWS that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems (reference (e)).

5. Contaminant. Any physical, chemical, biological, or radiological substance or matter in water (reference (e)).

6. Conventional Filtration Treatment. A series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal (reference (e)).

8. Direct Filtration. A series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal (reference (e)).

9. Disinfectant. Any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms (reference (e)).

10. Fluid. Any material or substance which flows or moves, whether as a

semisolid, liquid, sludge, gas, or in any other form or state (reference (aa)).

11. Generator. Any person, by site location, whose act or process produces HW identified or listed in reference (af) (reference (aa)).

12. Groundwater. Water below the land surface in a zone of saturation (reference (aa)).

13. Groundwater Under the Influence of Surface Water. Any water beneath the surface of the ground with:

a. Significant occurrence of insects or other macroorganisms, algae, or large diameter pathogens such as Giardia lamblia (reference (e)).

b. Significant and rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions (reference (e)).

14. Injection Well. A well into which fluids are injected (reference (aa)).

15. Lead Service Line. A service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck, or other fitting which is connected to such lead line (reference (e)).

16. MCL. The maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the ultimate user, except in cases where the maximum permissible level is measured at the point of entry to the distribution system (reference (e)).

17. MCLG. The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MCLGs are nonenforceable health goals (reference (e)).

18. MRDL. A level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. For chlorine and chloramines, a PWS is in compliance with the MRDL when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL. For chlorine dioxide, a PWS is in compliance with the MRDL when daily samples are taken at the entrance to the distribution system and no two consecutive daily samples exceed the MRDL. MRDLs are enforceable in the same manner as MCLs under section 1412 of reference (a). There is convincing evidence that addition of a disinfectant is necessary for control of waterborne microbial contaminants. Notwithstanding the MRDLs listed in section 65 of reference (e), operators may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system to a level, and for a period necessary, to protect public health to address specific microbiological contamination problems caused by circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections (reference (e)).

19. MRDLG. The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are

nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants (reference (e)).

20. Noncommunity Water System. A PWS that is not a CWS (reference (e)).

21. NTNCWS. A PWS, known as a nontransient, noncommunity water system, that is not a CWS and that regularly serves at least 25 of the same persons for over 6 months per year (reference (e)).

22. Optimal Corrosion Control Treatment. For the purpose of subpart I, the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while insuring that the treatment does not cause the water system to violate any NPDWR (reference (e)).

23. Owner or Operator. The owner or operator of any activity or facility subject to regulation under the UIC program (reference (aa)).

24. Permit. An authorization, license, or equivalent control document issued by the EPA or an approved state to implement the requirements of the UIC program. The permit includes "area" permit and "emergency" permit, but does not include UIC authorization by rule or any permit which has not yet been the subject of final agency action, such as a draft permit (reference (aa)).

25. Person. An individual; corporation; company; association; partnership; municipality; or Federal, state, or tribal agency (reference (e)).

26. Point-of-Entry Treatment Device. A treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building (reference (e)).

27. Potable Water. Water that has been examined and treated to meet the proper standards and declared by responsible authorities to be fit for drinking.

28. PWS. A system for the provision of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. This term includes:

a. Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system (reference (e)).

b. Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system (reference (e)).

29. Sanitary Survey. An onsite review of the water source, facilities, equipment, operation, and maintenance of a PWS for the purpose of evaluating the adequacy of such source, facilities, equipment, operation, and maintenance for producing and distributing safe drinking water (reference (e)).

30. Subpart H Systems. PWSs using surface water or GWUDI of surface water as a source that are subject to the requirements of subpart H of this part (reference (e)).
31. Supplier of Water. Any person who owns or operates a public PWS (reference (e)).
32. Surface Water. All water which is open to the atmosphere and subject to surface runoff (reference (e)).
33. Total Organic Carbon (TOC). TOC in mg/L measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants that convert organic carbon to carbon dioxide, rounded to two significant figures (reference (e)).
34. TTHM. The sum of the concentration in mg/L of the trihalomethane compounds (trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform)), rounded to two significant figures (reference (e)).
35. Underground Injection Control. The regulation of the injection of fluids into the subsurface through a well to protect groundwater for potential use as drinking water (reference (aa)).
36. Virus. A virus of fecal origin which is infectious to humans by waterborne transmission (reference (e)).
37. Well. A bored, drilled, or driven shaft; or a dug hole, whose depth is greater than the largest surface dimension (reference (aa)).
38. Wellhead Protection Area. The surface and subsurface area surrounding a water well or well field supplying a PWS through which contaminants are reasonably likely to move and to reach such water well or well field (reference (a), section 1428(e)).
39. Wholesale System. A PWS that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another PWS. Delivery may be through a direct systems connection or through the distribution system of one or more consecutive systems (reference (e)).
40. Year-Round Resident. For purposes of applicability to Marine Corps installations, a year-round resident is defined as an installation resident or year-round employee who is regularly served (eight or more hours daily) by the water system. State definitions will apply in cases where the definitions differ.

CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

SECTION 2: MARINE CORPS POLICY

16200. GENERAL

1. Marine Corps installations will comply with all applicable Federal, state, and local drinking water laws, regulations, E.O.s and Marine Corps, Navy, and DOD policies. This Marine Corps policy provides additional drinking water requirements.

2. The use of a regional or municipal public water supply will be the preferred drinking water supply method whenever an analysis of life-cycle costs and environmental impacts indicates that the use of such supply is more beneficial, economically and environmentally, than constructing, upgrading, and operating a water collection and treatment facility. Economic components used in the analysis should include any capital cost contributions to the municipality for a prorated share of system capacity; continuing user fees and surcharges; treatment costs; and Marine Corps facility capital, operation, and maintenance costs (including expenses for permit fees; monitoring; utilities; equipment repair and replacement; solids handling and disposal; chemical usage; and personnel staffing, training, and certification). The environmental analysis should include surface water and ground water quality and quantity issues; threatened and endangered species impacts; and archaeological, cultural, and natural resources issues.

3. The development, expansion, and operation of Marine Corps-owned drinking water collection, treatment, storage, and distribution facilities are authorized whenever a municipal system or other alternatives are not available or cost-effective.

4. A Marine Corps PWS that purchases all of its water from a PWS subject to reference (e), does not operate collection or treatment facilities of its own, and does not "sell water" to another entity, generally, is not subject to section 3 of reference (e). Installations that purchase water from a PWS and subsequently distribute it to onsite activities or to any person or entity outside the community may be subject to reference (e). Contact the Primacy agency to determine whether compliance with all or part of reference (e) is required. Refer to reference (ag). Installations that rechlorinate or fluoridate water purchased from a PWS may be considered to be operating a treatment process and may be required to comply with reference (e). To avoid having to comply with all provisions of reference (e) except with those pertaining to microbiological contaminants, coliform monitoring, and disinfection or fluoride monitoring, the installation should request an exemption from the state. Marine Corps installations that qualify for an exemption from PWS permitting shall apply, in writing, to the Primacy agency for an exemption. In some cases, regulators issue a permit when it is not required.

16201. MONITORING

1. Marine Corps installations that own and operate a consecutive PWS subject to full or partial exemption from regulatory monitoring requirements under reference (e), sections 3 or 29, respectively, shall submit a letter to the

Primacy agency explaining the degree to which exemption criteria are applicable and request the exact requirements to be imposed on the consecutive PWS. The Primacy agency's response letter shall be permanently retained in Marine Corps files.

2. Marine Corps PWSs will, at a minimum, accomplish the monitoring described below. This monitoring is required regardless of variance or exemptions from regulatory monitoring requirements.

a. Bacteriological Monitoring. Marine Corps PWSs shall perform bacteriological monitoring as specified in the TCR (section 21 of reference (e)). The use of EPA-approved kits by training personnel is acceptable for total coliform analyses. However, if a sample tests positive, follow up analysis must be accomplished using an EPA- or state-certified laboratory.

b. Asbestos. All Marine Corps water systems with asbestos cement pipes shall monitor for asbestos. At a minimum, one sample shall be taken every three years.

c. Lead in Priority Areas. All Marine Corps installations shall sample, test, and maintain resultant records for all drinking water coolers and outlets in the following priority areas to determine the presence of lead: primary and secondary schools, day care centers, hospital pediatric wards, maternity wards, and food preparation areas located on medical facilities. These records must be retained per reference (y), SSIC 5090.5. If initial screening results exceed 20 ppb in 250-mL samples, installations shall use full protocol sampling on affected outlets. If full protocol sampling exceeds 20 ppb, they shall secure the affected water outlets from service and institute permanent corrective measures. The following references provide program information including rationale and sampling protocols: references (ah) and (ai). A copy of all test results shall be made available for all schools, day care centers, and medical facilities where testing has been conducted. A notice of availability of the testing results shall be sent to the parents or legal guardians of children attending the affected school.

d. Lead and Copper in Water Systems. Marine Corps consecutive PWSs that serve family housing and were not included in the primary system sampling pool (at the time the primary system performed LCR monitoring) for lead and copper shall sample for lead and copper. Installations shall ensure the number and location of samples are sufficient to be representative of the system and in conformance with LCR procedures. This requirement can be waived if Marine Corps installations operating consecutive PWSs document that their water supplier passed its LCR monitoring and that the water being supplied to them is noncorrosive. A formal waiver does not need to be submitted but documentation must be maintained in drinking water program records.

e. Review of Primary PWS Records. Marine Corps consecutive PWSs shall, at least once a year, review the monitoring reports of the primary PWS. Installations shall use these reports, and other sources of information, to determine the risk of water quality deterioration within the distribution system. Installations shall ensure that water quality has not degraded above the MCL for parameters within the distribution system.

16202. CCRS. Marine Corps consecutive CWSs shall obtain a copy of their water supplier's CCR and amend this report with information on any additional

testing or exceedances and then distribute to consumers. For exceedances, only report data based on certified laboratory results. A good faith effort shall be made to ensure that all consumers are aware of the CCR and additional information. Recommended methods of report delivery include mailing to each housing unit, publishing in the command newspaper, posting on a website, and posting in conspicuous locations in each building on the installation. For more guidance, see reference (aj). CCRs are not required for Marine Corps facilities overseas.

16203. RECORDKEEPING. Marine Corps installations shall maintain records as follows:

1. Bacteriological results: five years, per reference (y), SSIC Code 5090.1a.
2. Chemical results: 10 years, per reference (y), SSIC Code 5090.1b.
3. Lead/copper testing results: 12 years, per reference (y), SSIC Code 5090.5.
4. Actions taken to correct violations, per reference (y), SSIC Code 5090.4.
5. Sanitary Survey reports, per reference (y), SSIC Code 5090.4.
6. Variance or exemption records, per reference (y), SSIC Code 5090.4.
7. Water treatment plant and/or distribution system operating records, per reference (y), SSIC Code 5090.4.
8. Cross-connection inspection records, per reference (y), SSIC Code 5090.4.
9. CCRs, per reference (y), SSIC Code 5090.4.

16204. SANITARY SURVEYS. In many instances, a state may require treatment plants or PWSs that are experiencing compliance problems, particularly with microbial pathogens, to perform a sanitary survey. The state regulatory agency will usually perform the survey. If the state allows, the installation can use a service provider of choice to complete the survey. In the absence of a state requirement, all Marine Corps PWSs shall perform a sanitary survey every five years.

1. Survey Requirements. For treatment plants, the survey should include the following:

a. Verification and re-evaluation of VAs, watershed protection programs, and WHPs, as applicable.

b. Examination of the source water physical components and condition.

c. Schematic diagrams of the treatment process and examination and evaluation of the adequacy and appropriateness of all elements of the current treatment process, including an assessment of operational flows versus treatment process rated capacity and, where appropriate, CT assessment (CT is defined in section 2 of reference (e)).

d. Examination and evaluation of the operation and maintenance of the

treatment facility including the condition and reliability of equipment, operator qualifications, use of approved chemicals, recordkeeping, process control, and safety programs.

e. Evaluation of the ability of the treatment plant to respond to changes in raw water fluctuations.

f. Evaluation of the treatment plant's emergency power supply and security measures.

2. Distribution System Sanitary Survey Review. The sanitary survey for the distribution system should include a review of the operations and maintenance program to address the following areas of concern:

- a. Elimination of unneeded or excess storage.
- b. Adequate turnover of storage tanks.
- c. Storage tank cleaning and maintenance.
- d. Adequate disinfection practices during all main repairs and replacement.
- e. If applicable, an effective corrosion control program.
- f. A comprehensive cross-connection control program.
- g. An aggressive valve and hydrant exercise program.
- h. An adequate water quality monitoring program that achieves compliance with the appropriate regulations and provides for effective water quality control.
- i. An adequate flushing program, preferably a Unidirectional Flushing program that is implemented on a yearly basis.

16205. OPERATION AND MAINTENANCE. Marine Corps installations that own and/or operate water systems (public and nonpublic, permitted and non-permitted) shall develop and implement an operation and maintenance program. Minimum requirements of the program are to meet the requirements of section 63(d)(3) in reference (e), and include the proper implementation and documentation of:

1. Emergency and preventive maintenance.
2. System disinfection after maintenance work is performed.
3. Scheduled flushing of the system.
4. Reduction of water quality problems, as needed.
5. Implementation and documentation of a valve exercise and maintenance program.
6. Proper operation and maintenance of storage tanks.

7. Maintenance of current water distribution maps.
8. Documentation of location and dates of water line breakage.
9. Documentation of emergency operations procedures required as a result of events such as earthquakes, hurricanes, chemical releases, and terrorist activities. Determination of response roles and responsibilities as well as contingency plans for providing potable water to the Marine Corps installation. Reference (ak) provides guidance on emergency planning.

16206. CROSS-CONNECTION CONTROL

1. All installations that own or operate a water system shall develop and implement a Cross-Connection Control and Backflow Prevention Program. At a minimum, the Cross-Connection Control and Backflow Prevention Program shall include procedures and mechanisms to:
  - a. Find and eliminate existing cross-connections and prevent new cross-connections.
  - b. When cross-connections cannot be eliminated, install, inspect, and test backflow preventers.
  - c. Keep an inventory of all existing backflow preventers.
  - d. Certify all backflow preventers as required by the regulatory agency. If there is no regulatory requirement, then all backflow preventers should be certified at least once every six months for high hazards and once every 12 months for low hazards by a certified inspector.
  - e. Promptly repair or replace defective backflow preventers.
2. The following documents provide guidance on cross-connection control and backflow prevention:
  - a. Naval Facilities Engineering Service Center (reference (al)).
  - b. EPA document (reference (am)).

16207. WATER SYSTEM VAs AND ERPs. DOD and Navy policies require all Marine Corps drinking water systems serving more than 25 consumers to complete an initial VA and ERP. Systems subject to this requirement include consecutive and unregulated systems in the U.S. and its possessions and territories, small community and non-community PWSs in the U.S. and its possessions and territories, and overseas systems that produce water or are provided water by a local supplier. All Marine Corps PWSs shall, at a minimum, address the assessment areas established under section 401 of reference (c), as follows:

1. A review of pipes and constructed conveyances.
2. Physical barriers.
3. Water collection, pretreatment, treatment, storage, and distribution facilities.
4. Electronic, computer, or other automated systems which are utilized by

the PWS.

5. Use, storage, or handling of various chemicals.
6. Operation and maintenance of the system.

16208. UIC PROGRAM. Marine Corps installations must not operate or inject fluids into Class I, II, III, or IV injection wells. Marine Corps installations must properly close all class V injection wells which are not essential to mission requirements in order to eliminate potential sources of ground water contamination and prevent illicit disposal of HS.

16209. WATER CONSERVATION. As required by references (ad) and (ae), Marine Corps installations must reduce water consumption intensity by 26 percent by FY 2020 using life-cycle cost effective measures relative to an FY2007 baseline. In addition, installations must reduce industrial, landscaping, and agricultural water consumption by 20 percent by 2020 relative to an FY2010 baseline. Potential water conservation measures are listed below, and further guidance is provided in reference (an):

1. Installation of water efficient industrial equipment and recycling of industrial process water.
2. Water efficient and low flow showers, toilets, faucets and other fixtures and devices where applicable.
3. Timely repairs of water service line leaks and main breaks.
4. Routine leak detection surveys.
5. Water use metering and periodic water audits.

16210. CONSUMPTIVE USE PERMITS. In coordination with legal and technical staff at the claimant and appropriate regional commander, installations that withdraw ground water shall:

1. Document historical water use.
2. Determine reasonable foreseeable future water uses.
3. Evaluate water rights laws.
4. Determine, on a case by case basis, whether the installation should obtain a consumptive use permit.
5. When applying for a consumptive use permit, ensure that restrictions will not impact mission requirements.

16211. PERCHLORATE.

1. Marine Corps installations that own PWSs (to include consecutive systems), and are required to sample for inorganic analytes pursuant to regulatory requirements, shall sample for perchlorate in finished water for at least two consecutive quarters. Note that affected installations should have already performed this sampling, as required under former DOD and Marine Corps perchlorate management policies. Installations with confirmed results

indicating the presence of perchlorate in finished drinking water shall notify CMC (LF) for further action. These installations shall continue sampling quarterly until CMC (LF) is satisfied that perchlorate concentrations are likely to remain below 15 ppb, an applicable state MCL, or a Federal MCL, whichever is lowest. If analytical results do not indicate the presence of perchlorate, no further sampling or action is required, except as required by state or local regulations. Marine Corps-owned PWSs shall comply with any Federal, state, or local enforceable perchlorate drinking water standards.

2. Installations shall enter all drinking water perchlorate sampling data into DOD's perchlorate database annually.

3. Marine Corps permanent facilities overseas are not subject to DOD or Marine Corps perchlorate sampling and reporting requirements.

4. Marine Corps-owned PWSs that use sodium hypochlorite for disinfection should ensure optimum conditions for storage of the product to avoid potential generation of perchlorate in the drinking water distribution system from aged hypochlorite (refer to reference (aq)).

5. Refer to perchlorate-related references (ao), (ap), (aq), and (ar).

16212. TRAINING.

1. General. All Marine Corps personnel involved in the drinking water systems and water conservation shall receive appropriate environmental training.

2. Water Treatment and Distribution System Operators. Installations shall ensure their water treatment and distribution system operators are trained and certified per applicable Federal, state, and local regulations. Training should include the following elements:

- a. Basic water plant and/or distribution system design.
- b. Basic water plant and/or distribution system operation.
- c. Basic maintenance and calibration of plant controls and equipment.
- d. Water plant and/or distribution systems treatment principles, including chemical storage and handling.
- e. Water sampling and analysis.
- f. Water plant and/or distribution system documentation and reporting requirements.
- g. Cross-connection control and backflow prevention.

CHAPTER 16

DRINKING WATER SYSTEMS AND WATER CONSERVATION

SECTION 3: RESPONSIBILITIES

16300. CMC (LF)/COMMANDER MCICOM.

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to drinking water systems and water conservation and uniformly apply Marine Corps policy as set forth in this Manual.
2. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
3. Conduct special environmental compliance and protection studies with regard to drinking water systems and water conservation management to assist in establishing policy or initiating actions.
4. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to drinking water systems and water conservation regulations.
5. Track Marine Corps progress toward meeting established drinking water quality and water conservation goals.

16301. CHIEF BUREAU OF MEDICINE AND SURGERY.

1. Revise instructions and other appropriate documents to reflect health concerns and health-related requirements for drinking water systems.
2. Provide health-related advice to Marine Corps commanders for carrying out their responsibilities for drinking water quality and the water supply system.

16302. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES.

1. Identify and submit to the CMC (LF) project documentation and funding requests for drinking water systems that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with drinking water systems and water conservation requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all drinking water systems and water conservation projects.
3. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished either by writing an ECPSOP document to implement all environmental requirements or by writing a separate base order to implement

specifications of this chapter alone.

4. Identify and submit to the CMC (LF) nonrecurring projects and funding required to make drinking water systems, potential contamination sources within WHP areas, and underground injection wells compliant with applicable existing and emerging regulations, requirements, and permits. Program and budget for sufficient personnel, equipment, materials, training, and monitoring resources required to effectively operate, maintain, and repair drinking water systems in compliance with drinking water program requirements. With command counsel concurrence, pay related Federal, state, and local fees.

5. Operate and maintain adequate facilities to produce, store, and distribute drinking water in the quantities required in compliance with reference (e) and applicable state standards, regulations, and requirements.

6. Ensure that management programs and controls exist to comply with applicable regulations; NPDWR, MCLs, and TTs; UIC permit conditions; and monitoring, recordkeeping, public notification, and reporting requirements for drinking water systems and underground injection wells.

7. Ensure compliance with all applicable water system operator certification requirements. Identify training and certification needs for Marine Corps operators of PWSs and allocate needed resources.

8. Oversee and provide resources for monitoring, recordkeeping, reporting, public notification practices, and the use of certified laboratories for analyses in compliance with EPA or EPA-approved state requirements. Retain copies of all records, reports, and public notices submitted to EPA, state, and local water district offices per the applicable SSIC in reference (y).

9. Submit annual CCRs to consumers and provide a copy to CMC (LF).

10. Coordinate with appropriate EPA, state, and regional offices the review of all projects for the construction of new or upgraded drinking water system facilities and for the construction, modification, or closure of underground injection wells.

11. Implement corrosion control treatment, source water treatment, and/or lead service piping replacement as needed to comply with NPDWR requirements for the control of lead and copper in drinking water.

12. Ensure that a cross-connection control and backflow prevention program is developed and implemented. Properly inspect, operate, and maintain backflow prevention devices, altitude and pressure-reducing valves, water meters, water-saving devices, and water reuse and recycling systems.

13. Ensure that the installation has applied for, and obtained, all required Federal and state UIC permits. Comply with UIC requirements under reference (a). Inventory all class V wells and provide a copy of the inventory to the EPA or state, as appropriate.

14. Implement a multifaceted Marine Corps water conservation program that meets statutory and E.O. requirements. Execute water conservation studies to reduce water usage and generation of wastewater flows. Review the various uses of water at respective activities to ensure that all economically practical water conservation measures are taken. Ensure that all water

conservation measures with payback periods of less than 10 years, as required by EFACT, are installed in government-owned buildings.

15. Ensure that adequate access to drinking water system collection, treatment, storage, and disposal facilities, and underground injection wells, is provided to the EPA, state, and local regulatory agencies for the purpose of sampling water and injected wastes, and for the inspection of operations and records.

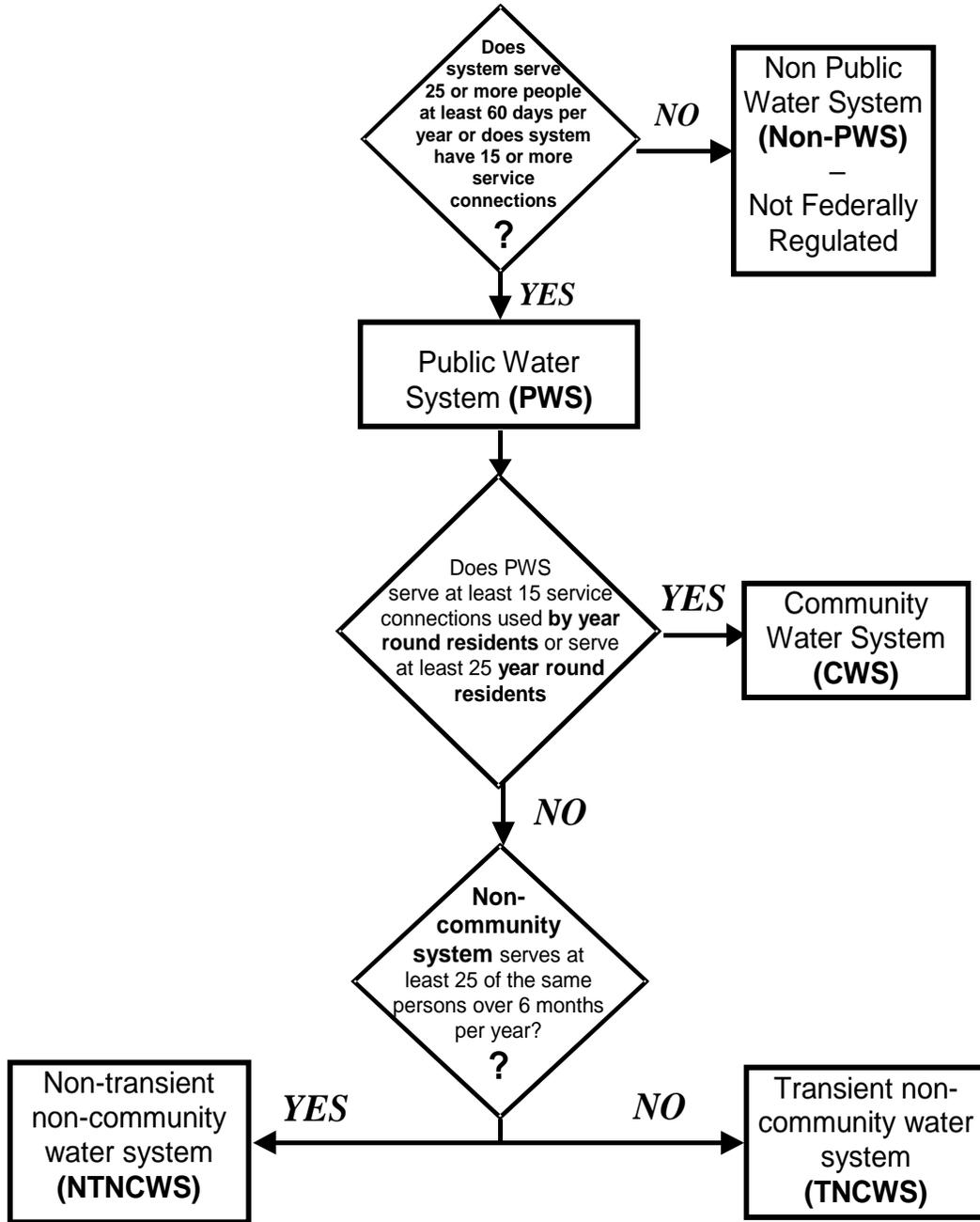
16. Ensure that water systems serving 25 to 3,300 people perform a VA and develop/revise ERPs per DOD and Navy policies. Review the VA and emergency response plan every five years or when there is a change in the water source or system process.

REFERENCES

- (a) 42 U.S.C. 300f et seq.
- (b) 42 U.S.C. 201 et seq.
- (c) Public Law 107-188, "Public Health Security and Bioterrorism Preparedness and Response Act of 2002," June 12, 2002
- (d) Public Law 104-182, "Safe Drinking Water Act Amendments of 1996," August 6, 1996
- (e) 40 CFR 141
- (f) 40 CFR 149
- (g) Federal Register, Volume 66, page 6975, January 22, 2001
- (h) Federal Register, Volume 65, page 76708, December 7, 2000
- (i) Federal Register, Volume 54, page 27544, June 29, 1989 (NOTAL)
- (j) Federal Register, Volume 63, page 69478, December 16, 1998
- (k) Federal Register, Volume 63, page 69389, December 16, 1998
- (l) Federal Register, Volume 66, page 31085, June 8, 2001
- (m) Federal Register, Volume 67, page 1811, January 14, 2002
- (n) Federal Register, Volume 71, page 654, January 5, 2006
- (o) Federal Register, Volume 71, page 387, January 4, 2006
- (p) Federal Register, Volume 71, page 65574, November 8, 2006
- (q) Federal Register, Volume 64, page 59245, November 2, 1999
- (r) Federal Register, Volume 56, page 26460, June 7, 1991
- (s) Federal Register, Volume 65, page 1950, January 12, 2000
- (t) Federal Register, Volume 72, page 57782, October 10, 2007
- (u) Federal Register, Volume 64, page 50555, September 17, 1999
- (v) Federal Register, Volume 65, page 11371, March 2, 2000
- (w) Federal Register, Volume 66, page 2273, January 11, 2001
- (x) Federal Register, Volume 65, page 25982, May 4, 2000
- (y) SECNAV M-5210.1
- (z) 40 CFR 143

- (aa) 40 CFR 144
- (ab) 40 CFR 148
- (ac) EPA Office of Ground Water and Drinking Water, Fact Sheet: Designated Sole Source Aquifers - Nationally
- (ad) E.O. 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (ae) E.O. 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," October 8, 2009
- (af) 40 CFR 261
- (ag) Federal Register, Volume 68, page 74233, December 23, 2003
- (ah) EPA/812-B-94-002, "Lead in Drinking Water in Schools and Non-Residential Buildings," April 1994
- (ai) NAVFAC, "Guidance for Sampling Water Coolers," May 1998
- (aj) DOD Services Steering Committee CCR Guidance Document, February 1999
- (ak) American Water Works Association Manual of Standard Practices, "Emergency Planning for Water Utility Management," Manual Number M19, Second Edition, 1984 (<http://www.awwa.org>)
- (al) UG-2029-ENV "Cross-Connection Control and Backflow Prevention Program Implementation at Navy Shore Facilities," (May 1998)
- (am) EPA 816-R-03-002, "Cross Connection Control Manual," February 2003
- (an) Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007
- (ao) DOD Perchlorate Handbook, August 2007  
(<https://www.denix.osd.mil/portal/page/portal/EDQW/Perchlorate>)
- (ap) DUSD Memorandum, "Actions in Response to Perchlorate Releases," September 21, 2007
- (aq) DUSD Memorandum, "Perchlorate Release Management Policy," April 22, 2009
- (ar) HQMC Memorandum, "Distribution of DOD Perchlorate Release Management Policy," January 6, 2010

# Water System Classification Flowchart<sup>1,2</sup>



- (1) In accordance with Federal laws, State & local laws may be more stringent.
- (2) Does not address regulatory requirements of consecutive water systems. This is determined independently by each state.

Figure 16-1.--Water System Classification Flowchart

CHAPTER 17

SOLID WASTE (SW) MANAGEMENT AND RESOURCE RECOVERY

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CHAPTER 17

SOLID WASTE (SW) MANAGEMENT AND RESOURCE RECOVERY

SECTION 1: INTRODUCTION

17100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory and procedural requirements for solid waste (SW) disposal, waste minimization, recycling, and resource recovery requirements.

17101. APPLICABILITY. See paragraph 1101.

17102. BACKGROUND. Reference (a), as amended by reference (b) in 1976, establishes requirements concerning the disposal and management of SW. Facilities are subject to subtitle D, SW rules of reference (b), if they perform, or are designed to perform, any of the following activities:

1. Thermally process 50 tons or more per day of municipal-type SW (reference (c)).
2. Store or collect residential, commercial, and institutional SW (reference (d)).
3. Source separate materials for recovery (reference (e)),
4. Purchase products that contain recycled materials (reference (f)).
5. Operate land disposal sites or use commercial off-site landfills for SW disposal (references (g) and (h)).
6. Generates SW recycling revenue (reference (i)).

17103. FEDERAL STATUTES

1. SWDA of 1965, as Amended in 1976 (42 U.S.C. 6901 et seq.). The SWDA requires that Federal installations comply with all Federal, state, and local requirements concerning the disposal and management of SW. These requirements include permitting, licensing, and reporting. The Act encourages the beneficial reuse of waste through recycling and burning for energy recovery. Additionally it requires the procurement, to the maximum extent possible, of EPA guideline products that contain recycled materials. This is outlined in the Comprehensive Procurement Guide VI issued in August 2004 and authorized under the RCRA 6002.

2. Federal Facilities Compliance Act of 1992 amends the SWDA section 6001 (42 U.S.C. 6961). This law allows Federal and state regulators to enforce Federal, state, and local SW laws and regulations at Federal facilities.

3. RCRA of 1976 (42 U.S.C. 6901 et seq.). RCRA defines SW and identifies what SW is considered HW, and sets strict requirements for the handling of HW. RCRA Subtitle C regulates HW, which is fully discussed in chapter 9. Subtitle D of RCRA focuses primarily on managing municipal and SW. The goals

of subtitle D are to encourage state and local governments to plan, permit, regulate, implement, and enforce agencies to manage and dispose of household and industrial or commercial nonhazardous SWs in an environmentally sound manner. This includes the recycling of waste material and resource conservation. Subtitle D has mandatory technical standards for nonhazardous SW disposal facilities.

4. CAA of 1970, as Amended (42 U.S.C. 7401 et seq.). Section 112 of the CAA authorizes the EPA to set emission standards for HAPs. In 1973, a standard for the control of asbestos fibers was issued as part of the National Emissions Standards for HAPs. Regulations addressing asbestos disposal in SW landfills are included in the CAA, section VI, Special Pollutants.

5. Military Construction Codification Act of 1982 (Public Law 97-214). Section 6 of the Military Construction Codification Act contains a provision that allows net proceeds from the sale of recyclable materials to be used by Marine Corps installations having QRP for certain purposes.

6. Federal Property and Administrative Services Act (FPAS) of 1949 (10 U.S.C. 484 et seq.). Section 203 of the FPAS contains provisions on the sale of recyclable materials.

7. PPA of 1990 (42 U.S.C. 13101 and 13102, s/s et seq.). This Act establishes the national policy that "pollution should be prevented at the source whenever feasible. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."

8. E.O. 13423, "Strengthening Federal Environmental, Energy, and Transportation Management", January 24, 2007. E.O. 13423 revoked E.O. 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," September 14, 1998. E.O. 13423's goal is to integrate and improve existing practices and requirements into a strategic approach to enhance environmental performance and sustain our compliance with legal and regulatory requirements. E.O. 13423 sections 2(e), 3(a), 3(e), and 3(f) require agencies to increase SW diversion by December 21, 2010, maintain cost effective waste prevention and recycling programs, and implement sustainable practices for pollution and waste prevention and recycling. The goals also require agencies to meet the 35 percent recycling goal established by EPA, and ensure new and renewed contracts, permits, and any other legally binding obligations between an agency and a contractor, tenant, or concessionaire include responsibilities for meeting the intent of E.O. 13423.

9. Instructions for Implementing E.O. 13423, March 27, 2007, defines agency requirements for implementing the new E.O. 13423 and provides broad strategies for achieving them. The Solid Waste Diversion and Recycling section provides additional guidance on the proper retention of recycling revenue in accordance with Public Law 103-329, section 608.

10. The DOD Integrated (Non-Hazardous) Solid Waste Management Policy February 1, 2008, defines agency requirements for implementing the SW and recycling requirements of E.O 13423. It requires DOD component installations to implement integrated solid waste management (ISWM) to achieve SW diversion goals. While P2 and source reduction remain the first considerations, ISWM is based on a more refined EMH that employs a hierarchy of approaches and technologies for managing SW to maximize resource conservation and protect the environment. Generally, the higher in the hierarchy for the technology or process, the more benefits gained in efficiency and retained economic value. The ISWM hierarchy, from highest to lowest, is source reduction, reuse, donation, recycling, composting/mulching, incineration for volume reduction with energy recovery, other forms of volume reduction, and landfilling. The ISWM Policy requires SW managers to have a thorough understanding of the composition of the waste stream; be informed about reuse opportunities, composting technologies, and recyclable commodities markets through economic analysis and market research; know the available options for waste diversion or disposal; and understand associated costs and cost avoidance. Under the ISWM, installations must make every effort to find the most cost effective, energy efficient, least polluting ways to deal with the various items typically found in an installation's solid SW stream.

17104. REQUIREMENTS

1. SW Collection, Storage, and Disposal

a. Federal, state, and local requirements concerning collection, storage, and disposal apply to Marine Corps installations that:

(1) Generate SW, whether it is collected by the Marine Corps or by a nonmilitary collector. All SW generated must first be evaluated to determine if that waste is a HW in accordance with section 11 of reference (j). HW is discussed in detail in chapter 9 of this Manual.

(2) Dispose of SW on Marine Corps property, regardless of whether the waste is originated by the Marine Corps or other sources.

(3) Dispose of SW off Marine Corps property if the waste is generated by a Marine Corps installation and if the installation has direct management control over the disposal operation.

b. References (c), (d), (e), (f), (g), and (h) contain applicable Federal regulations for nonhazardous SW. Federal SW requirements have changed dramatically over the last several years, with most changes occurring in the following areas:

(1) Federal procurement of selected products containing recovered materials and postconsumer wastes including oil, paper, tires, and building insulation (reference (f)).

(2) Requirements for Municipal Solid Waste Landfills (MSWLFs) (reference (h)).

c. Marine Corps waste materials (including trash, rubbish, dunnage, garbage, construction debris, and liquid waste) must not be burned in open fires, except in limited situations after considering health and safety issues and with the approval of the appropriate state or local agencies and EPA regional office.

## 2. Thermal Processing of SW

a. Federal (reference (c)), state, and local requirements are applicable to thermal processing facilities designed to process 50 tons per day or more of SW. For practical purposes, these requirements apply to any facility designed to process, or which actually processes, an average of 2.1 tons per hour or more (section 100(a) in reference (c)).

b. Emissions must not exceed the existing air quality or emission standards established by EPA, state, or local agencies. All water discharged from a thermal processing facility must be treated sufficiently to meet applicable effluent limitation standards. All necessary permits must be obtained from the appropriate Federal, state, or local agencies.

c. Thermal processing residue must be disposed of in an environmentally acceptable manner. Land disposal of residues must be per EPA guidelines for the land disposal of SWs. The guidelines also apply to those nonHWS that cannot be thermally processed for reasons of health, safety, or technological limitation.

3. Marine Corps-Owned Land Disposal Sites. EPA promulgated requirements for MSWLFs which became effective on October 9, 1991 (reference (h)). The regulations address the design, location, construction, operation, closure, and postclosure of MSWLFs as follows:

a. MSWLFs and lateral expansions that stopped receiving SW on or before October 9, 1991, do not have to meet the requirements.

b. MSWLFs and lateral expansions that received SW after October 9, 1991, but stopped receiving SW on or before October 9, 1997, only have to meet the final cover requirements specified in section 60(a) of reference (h). The final cover must have been installed no later than six months after receipt of the last wastes in accordance with section 60 of reference (h). If closure will exceed the six-month timeframe, an extension must be received from the state after the operator demonstrates that he has taken, and will continue to take, all steps to prevent exposure to human health and environment.

c. MSWLFs and lateral expansions that continue to receive wastes after October 9, 1993, must meet all of the requirements. Refer to section 1(f) of reference (h) for site- and condition-specific exemptions for MSWLFs that continue to receive SW.

4. Marine Corps-Owned Land Disposal Sites Receiving HW from CESQGs. EPA promulgated revisions to existing criteria for SW disposal facilities and practices, for Nonmunicipal Nonhazardous Waste Disposal Units that receive CESQG HW (subpart B in reference (g)). MSWLFs that receive CESQG HW must

comply with sections 7 through 13 and section 30 of reference (g) by January 1, 1998, and sections 21 through 28 of reference (g) by July 1, 1998. These regulations address location, groundwater monitoring, and corrective action. Any MSWLF that receives CESQG HW is also subject to sections 3-2, 3-3, 3-5, 3-6, 3-7, and 3-8(a), (b), and (d) of reference (g).

5. SW Resource Recovery

a. General. The philosophy underlying resource recovery is that material or energy recovery from waste is possible at a point downstream from the point of generation, and is an alternative to landfilling, incinerating, or otherwise disposing of the waste in a manner harmful to the environment or wasteful of natural resources.

b. Recyclable Materials Sales Programs. Only installations with a QRP may accumulate proceeds from the sale of recyclable materials.

(1) DOD policy requires all installations and commands to establish recycling programs and procedures that:

(a) Ensure, where cost-effective, that all installations and activities have, or participate in, QRPs and that these recycling programs are available to serve all host and tenant organizations occupying space on the installation, including leased space.

(b) Ensure, where cost-effective, that contracts awarded after the effective date of this Manual, new or renewed, that provide for contractor operation of a government-owned or -leased facility located within the United States, its territories, or possessions include provisions that obligate the contractor to participate in a recycling program. Participation by contractors operating government-owned or -leased facilities overseas where recycling programs are available is required.

(c) Ensure that QRP procedures address recyclable materials, excluded materials, and other QRP materials.

(d) Divert recyclable materials from the nonhazardous SW stream where economically feasible (where the cost of diversion less any proceeds is less than the cost of disposal). Individual types of recyclable materials that make up a substantial percentage of the nonhazardous waste stream should be included in recycling programs. Recyclable materials do not require formal screening as defined in reference (k) for reutilization, transfer, or donation.

(e) Establish controls that ensure excluded materials, including those listed in section 2(b)(3) of reference (i), are not sold through a QRP.

(f) Authorize installation commanders, as appropriate, to sell directly recyclable and other QRP materials or to consign them to DRMS for sale.

1. Installations must implement procedures ensuring that United States trade security control policies are followed in accordance with

reference (l) prior to directly selling firing range-expended brass or mixed metals gleaned from firing range cleanup that do not require demilitarization and that are Munitions List Items (MLIs) or Strategic List Items (SLIs). Expended brass must be crushed, shredded, or otherwise destroyed prior to public sale.

2. Reuse Screening. Prior to selling other QRP materials directly, installations must implement procedures for local reuse screening to consider reutilization, transfer, and donation programs in accordance with reference (k).

3. Ensure that outside the United States, the disposition of recyclable and other QRP materials, derived from goods that have been imported duty-free, is accomplished consistent with the provisions contained in status of forces, surplus, or excess property agreements or other international agreements with host nations.

(g) Ensure the distribution of proceeds from recycled material governed by reference (m).

1. Sale proceeds will be used first to cover the costs directly attributable to all installation recycling programs, including, but not limited to manpower, facilities, training, program awareness expenses, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for environmental compliance, P2, composting, alternative fuel vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's P2 plan. Any remaining proceeds may be transferred to the nonappropriated Marine Corps Community Services (MCCSs) account for any approved programs.

2. An accounting and control system must be established for a recycling program that provides detailed management and audit information, tracks quantity of material handled, calculates sales and handling costs for recycled material, and tracks expenditures made for appropriate projects and MCCS programs. Integrity of the audit trail will be a priority concern.

3. Ensure that appropriate management controls are in place for recyclable materials that may be hazardous, such as lead-acid batteries.

(2) A QRP can be established by a base or station order and must include the following program requirements:

(a) Designate through the CG/CO, the managing entity. Potential managing units include: environmental affairs, facilities, or a similar staff entity.

(b) Ensure fiscal accountability for all funds received and disbursed as per reference (n) and appendix L in reference (o).

(c) Record maintenance regarding the quantity and types of materials sold for recycling.

(d) Develop a method of prioritizing projects/ activities to be funded from net proceeds. This process is usually accomplished by establishing a committee consisting of a cross section of installation organizations. This committee recommends priorities for the disbursement of revenues to the CG/CO.

(e) Ensure that the CMC (LF) reviews all projects funded with the proceeds of recycling sales.

(f) Implement the requirements in this Manual for the sale of recyclable material.

(g) Notify the DLA, Disposition Services that the installation has a QRP implemented by base or station orders as established by the Military Construction Codification Act. An installation may notify DRMO and accumulate proceeds through the sale of recyclable materials during the period that a base or station order is being prepared.

(3) If Marine Corps installations with QRPs sell recyclable materials using DRMO, a cost analysis should be performed by the installation to determine whether better value can be achieved for the QRP by performing direct sales.

(4) Operate a composting program or participate in a regional composting program, if it is practicable to do so.

c. Source Separation for Materials Recovery. Reference (e) provides guidelines applicable to the source separation of residential, commercial, and institutional SWs. The following delineates the minimum resource recovery actions from SW through source separation. Minimum actions are required for high-grade paper generated by office facilities with over 100 office workers, for newspapers at residential facilities in which more than 500 families reside, and for corrugated containers generated at commercial establishments generating 10 or more tons of waste per month. Marine Corps installations must consider the specific methods and systems under recommended procedures (reference (e)) for implementing a source separation program.

(1) High-Grade Paper. In accordance with reference (e), waste high-grade paper generated at Marine Corps installations with over 100 office workers must be separated at the source of generation, separately collected, and sold for the purpose of recycling. Exceptions may be made only if analysis by the managing installation or DRMO determines that a market for recovered products is not available, or that compliance is not economical (see paragraph 17104.5c(4)). In situations where a Marine Corps office facility is a tenant activity, the host activity (or party leasing the property) is responsible for establishing a source separation program. The Marine Corps office facility must encourage the establishment of such programs and cooperate by separating high-grade paper.

(2) Residential Materials Recovery. Section 201 of reference (e) requires recovery of newspaper in large residential areas; recommends recovery of newspaper in small residential areas; and recommends recovery of

glass, can, and mixed paper. Over 95 percent of Marine Corps family housing has been privatized as part of the Marine Corps PPV program which means that residential SW recovery may no longer be conducted by the base. PPV partners that operate and maintain the privatized housing can either dispose of the municipal waste in a private landfill or, if agreed upon by the base, in an installation-owned and operated landfill. If the PPV does not use the base landfill, Marine Corps policies do not apply. If the PPV partner uses the installation landfill, the base should ensure that agreements require the PPV to follow waste disposal practices that comply with Marine Corps Policy with respect to SW management. Any change in Marine Corps or local policy that would potentially result in additional cost to the PPV partnership using a base landfill will need to be coordinated with the partner in advance. The requirements for used newspaper for Marine Corps-owned family housing and for privatized housing for which the PPV partners use the base landfill are as follows:

(a) Installations must separate used newspapers generated in Marine Corps residential areas in which more than 500 families reside at the source of generation and sell them for recycling. Exceptions are appropriate only if the managing installation determines through analysis that markets are not available or that compliance is not economical (see paragraph 17104.5c(4)).

(b) Extensive news releases to residents for motivation and coordination should precede and accompany the program. Subsequent guidance should indicate the need for the program, the specific collection days, how to prepare bundles for collection, and the use of bulk containers outside multi-family dwellings. Consideration must be given to the specific methods and systems recommended in current requirements for the implementation of newspaper source separation programs.

(3) Corrugated Container Waste. Installations generating 10 or more tons of waste corrugated containers per month must separately collect and sell waste corrugated containers for the purpose of recycling. Exceptions are appropriate only if the managing installation determines through analysis that markets are not available or that compliance is not economical (see paragraph 17104.5c(4)).

(4) If Marine Corps installations make the determination not to source separate high-grade paper, residential materials, or corrugated containers, DRMO or the installations must prepare an analysis used in making the determination and maintain the analysis on file, which shall be reviewed and approved by the Secretary of the Navy. The decision to not recycle is valid only when a market analyses conducted by DRMO or the managing activity indicate that the recovered materials cannot be sold or disposed of economically because of a lack of market demand or the Secretary of Navy concludes that recycling is technically infeasible or inconsistent with stated national defense priorities. The following points are to be covered in the analysis:

(a) A description of alternative actions considered with emphasis on those alternatives that involve source separation for materials recovery.

(b) A description of ongoing actions which will be continued and new actions taken or proposed.

(c) An analysis in support of the action chosen including technical data, market studies, and policy considerations used in arriving at such a determination.

(d) An analysis of the applicable portions of the life-cycle costs associated with the operation, maintenance, closure, and postclosure of Marine Corps-owned SW landfills and the applicable costs of disposal by contract.

d. Resource Recovery Facilities

(1) Marine Corps installations must not compete with a locally available commercial recycling industry that offers a total SW resource recovery system as directed by reference (p). Installations should make every effort to use an established commercial industry.

(2) Marine Corps installations should consider constructing resource recovery facilities only after a thorough study has been made of alternative methods for processing SW.

e. Returnable Beverage Containers. Marine Corps installations must comply with state laws regarding beverage containers.

f. Records Requirements

(1) Federal regulations require the Marine Corps to determine what actions will be or have been adopted regarding source separation requirements. In situations when a decision is made not to source separate, the decision must be based on a fully supported analysis. If a source separation program is adopted, the sale of recyclable materials obtained as a result of the source separation or resource recovery guidelines or the sale of used petroleum products, less the cost of sales and handling, may be administered through the Defense Logistics Agency (DLA) and DRMO under the provisions of reference (k) or sold by the QRP per DOD policy. This procedure does not apply to waste materials turned over to voluntary organizations or civilian communities for recycling, or to military exchanges and commissary stores where the activity owns or leases its own processing equipment.

(2) DRMO must deposit 100 percent of recyclable material sales proceeds, net of cost obtained as a result of the source separation or resource recovery guidelines or the sale of used petroleum products, to the account designated by a managing activity that operates the QRP. The designated account number must appear on the Disposal Turn-in Document in order for DRMO to return the proceeds. Procedures governing the sale of recyclable materials must be consistent with section 203 of reference (q). Although the screening for utilization, transfer, and donation as described in reference (k) is not required prior to offering recyclable materials for sale, such screening may occur at the discretion of the DLA director.

g. Procurement. References (f), (r), and (s) contain the product areas that require GP, formally known as affirmative procurement. These products include paper and paper products, vehicular products, construction products, transportation products, park and recreation products, landscaping products, nonpaper office products, and miscellaneous products (e.g., pallets containing recovered material). Marine Corps installations must promote procurement of these and other recovered materials using EPA's Comprehensive Procurement Guidelines and EPA's Guidance on Acquisition of Environmentally Preferable Products and Services.

6. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

17105. TERMS AND DEFINITIONS

1. Composting. A controlled process for managing the degradation of plant and other organic wastes to produce a useful product that can be used as mulch or soil conditioner.

2. Integrated Solid Waste Management Hierarchy (ISWMH). National policy established by the PPA that "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner." When assessing solutions to compliance requirements, installations and commands will employ ISWMH, emphasizing:

- a. Source reduction.
- b. Reuse.
- c. Donation.
- d. Recycling.
- e. Composting/mulching.
- f. Incineration for volume reduction with energy recovery.
- g. Other forms of volume reduction.
- h. Landfilling.

3. Excluded Materials. Excluded materials may not be sold through a QRP, and the proceeds from their sale will not be returned to a QRP. Excluded items include, but are not limited to:

- a. Government-furnished material.

- b. Precious metal-bearing scrap.
  - c. HW (including household HW).
  - d. ODS.
  - e. Electrical components.
  - f. Unopened containers of solvents, paints, or oil.
  - g. Fuels.
  - h. Material that can be sold (as is) as a usable item.
  - i. Repairable items that may be used again for their original purposes or functions (e.g., used vehicles, vehicle parts, or machine parts).
  - j. Ships, aircraft, weapons, and other material required to be demilitarized or destroyed, as well as scrap resulting from demilitarization.
  - k. All MLIs or SLIs as defined in reference (k), except firing range-expanded brass and mixed metals gleaned from firing range cleanup. MLI always takes precedence over SLI.
  - l. Types of surplus personal property whose sales proceeds must be deposited to accounts other than a QRP per reference (i), Appendix B:
    - (1) Scrap generated from NWCF activities.
    - (2) Usable personal property purchased by NWCF activities.
    - (3) Property purchased with commissary surcharge funds.
    - (4) Automatic data processing equipment owned by the General Services Administration.
    - (5) Property purchased for the Military Assistance Program or purchased with Foreign Military Sales administrative funds.
    - (6) Coast Guard property.
    - (7) Property owned by nonappropriated fund activities.
    - (8) Lost, abandoned, or unclaimed privately owned personal property.
    - (9) Property owned by a country or international organization.
    - (10) Bones, fats, and meat trimmings generated by a commissary.
4. GP. Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse,

operation, maintenance, or disposal of the product or service. Components of GP and associated websites for further information are:

- a. Recovered material ([www.epa.gov/cpg](http://www.epa.gov/cpg)).
- b. Environmentally preferable ([www.epa.gov/epp](http://www.epa.gov/epp)).
- c. Energy efficient ([www.eere.energy.gov/femp/technologies/eeproducts.cfm](http://www.eere.energy.gov/femp/technologies/eeproducts.cfm)).
- d. Biobased products (<http://www.biobased.oce.usda.gov> and [www.ofee.gov/gp/bioprod.html](http://www.ofee.gov/gp/bioprod.html)).
- e. Alternative fuels and fuel efficiency (<http://www.eere.energy.gov/vehiclesandfuels/>).
- f. Non-ozone depleting substances (<http://www.ofee.gov/gp/snap.html>).

GP is also known as Affirmative Procurement or Environmentally Preferable Procurement.

5. Managing Activity. An administrative element assigned to manage the recycling program including personnel, funds, and equipment.

6. MSWLFs. A discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under section 2 of reference (g). An MSWLF also may receive other types of RCRA subtitle D wastes, such as commercial SW, nonhazardous sludge, small quantity generator waste, and industrial SW. Such a landfill may be publicly or privately owned. An MSWLF may be a new MSWLF, an existing MSWLF, or a lateral expansion.

7. MLIs. MLIs are military items that are controlled by the military department and require special handling during disposal in order to prevent any unauthorized use by purchasers. These items are assigned demilitarization codes when they enter into the DOD inventory and the items range from major weapon systems (tanks) to key components of related weapon systems (spring mechanisms in fire arms).

8. Other QRP Materials. Materials that fit neither the definition of recyclable materials nor the definition of excluded materials are classified as other QRP materials.

9. QRP. An organized operation that diverts or recovers scrap or waste streams, and that identifies, segregates, and maintains the integrity of the recyclable materials in order to maintain or enhance the marketability of the materials.

10. Recovered Material. Waste materials and by-products that have been recovered or diverted from solid waste but such term does not include those materials and by-products generated from and commonly used within an original manufacturing process (reference (t)).

11. Recyclable Materials. Recyclable materials can include, but are not limited to: high quality paper and paper products, mixed paper, newspaper, cardboard, plastic, metal cans, glass, used oil (except when the oil is an HW), batteries, and tires. In addition, scrap (including ferrous and non-ferrous scrap), firing range-expended brass, and mixed metals gleaned from firing range cleanup that do not require demilitarization and that are MLIs or SLIs may be included in a QRP. Expended brass must be crushed, shredded, or otherwise destroyed prior to public sale.
12. Recycling. The series of activities, including collection, separation, and processing, by which products or materials are recovered from the SW stream for use in the form of raw materials in the manufacturing of new products other than fuel for producing heat or power by combustion (section 207 of reference (u)).
13. Resource Recovery. The process of recovering material or energy from SW.
14. Resource Recovery Facility. Any physical plant that processes nonhazardous, commercial, or institutional SW biologically, chemically, or physically, and recovers useful products, such as shredded fuel, combustible oil or gas, steam, metal, and glass, for resale or reuse.
15. SW. Any garbage, refuse, trash, rubbish, sludge, waste, or scrap from commercial, agricultural, industrial, or residential activities. This classification does not include any of those materials that are identified as HW.
16. Source Reduction. Source reduction, as defined in the PPA, is any practice that:
  - a. Reduces the amount of any HS, pollutant, or contaminant, entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal.
  - b. Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modification, process or procedure modification, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. Source reduction does not entail any form of waste management (e.g., recycling, treatment, and disposal).
17. Source Separation. The separation of recyclable materials at their point of generation by the generator.
18. SLI. These items, under the jurisdiction of the Export Administration Regulations, U.S. Department of Commerce, have been assigned a code letter "A" or "B" following the Export Control Classification Number on the Commerce Control List, reference (v), and include both military and commercial items. They are controlled due to national security, foreign policy controls, nuclear proliferation, missile technology, chemical and biological warfare, and short supply.

19. Waste Office Paper. Materials such as letterhead, copy paper, miscellaneous business forms, stationary, typing paper, tablet sheets, and computer printouts and cards. Classified wastes are explicitly excluded, except when applicable security directives allow their inclusion.

CHAPTER 17

SOLID WASTE (SW) MANAGEMENT AND RESOURCE RECOVERY

SECTION 2: MARINE CORPS POLICY

17200. MARINE CORPS SW MANAGEMENT PROGRAMS

1. General

a. For disposal purposes, all SW generated at Marine Corps installations is considered property of the Federal Government except in those situations when Marine Corps exchanges and commissary stores salvage and dispose of their recoverable resources. Marine Corps installations must strive to reduce SW generation. SW collection, disposal, and resource recovery programs at Marine Corps installations must be implemented in the most cost-effective and environmentally acceptable manner. Changing mission requirements and market conditions necessitate the periodic review of these operations as commercial facilities become available, or as the installation's industrial-type activities change. Marine Corps installations must comply with the guidance of reference (w) for SW collection, storage, and disposal; and with reference (x) for the establishment and/or disestablishment of resource recovery/source separation programs. Contractors on Marine Corps installations must dispose of their SW per their contract requirements.

b. The Marine Corps will design SW disposal programs as total systems that consider the relative economic advantages of the latest technology as well as the potential for resource recovery. The Marine Corps will also explore shredding, compacting, energy recovery, and similar processes; and develop installation Integrated SW Management Plans according to the following hierarchy:

- (1) Source reduction.
- (2) Reuse.
- (3) Donation.
- (4) Recycling.
- (5) Composting/Mulching.
- (6) Incineration for volume reduction with energy recovery.
- (7) Other forms of volume reduction.
- (8) Landfilling.

c. All Marine Corps installations and commands must comply with DOD policy for recycling programs and procedures in accordance with reference (y).

2. Source Reduction. Marine Corps source reduction programs must incorporate the following, where feasible:

- a. Composting to facilitate yard waste reduction.
- b. Reducing excessive packaging, especially where packaging is used for attractive merchandising or convenience functions.
- c. Procurement of materials that generate less waste.
- d. Reducing waste generation in an office by:
  - (1) Reusing materials (e.g., file folders, paper clips, and interoffice routing envelopes).
  - (2) Dual-sided copying.
  - (3) Duplex printing.
  - (4) Using electronic mail instead of paper memos.
  - (5) Reducing mail and distribution lists.
- e. Using General Supply Administration and DOD EMALL supply system for green products. This should be done in accordance with reference (z).

3. SW Resource Recovery

a. All Marine Corps installations, where cost-effective, must implement source separation for recycling and develop a single authorized QRP which has controls to ensure that excluded materials, including those listed in section 2(b)(3) of reference (i), and are not sold through the program. All Marine Corps commands/units and tenants must participate in the host activity's QRP. Materials for which proceeds can be obtained must be sold through the host's QRP. Industrial funded activities must maintain separate accounting for recycled materials purchased with industrial funds.

b. All Marine Corps installations must establish an installation recycling program for the following purposes:

- (1) To protect the environment and prevent the depletion of valuable natural resources.
- (2) To comply with Federal, state, and local environmental laws and regulations.
- (3) To reduce the volume of waste disposed in landfills.
- (4) To reuse readily available resources.
- (5) To avoid excessive costs for the disposal of SW by other means.
- (6) To obtain proceeds from the sale of recyclable material.

c. Marine Corps installations, at a minimum, must segregate the following materials for recycling:

- (1) Scrap metal.
- (2) High-grade paper.
- (3) Newspaper in large residential areas (more than 500 families).
- (4) Corrugated containers from commercial establishments generating 10 or more tons of waste per month.
- (5) Aluminum cans.

d. Consider exceptions to recycling these materials only in the following situations:

- (1) When state or local regulations do not require recycling.
- (2) When market analyses conducted by DRMO or the managing activity indicate that the recovered materials cannot be sold or disposed of economically because of a lack of market demand (see paragraph 17104.5c(4)).
- (3) When the net costs exceed the net income plus avoided costs for disposal by another means.

e. Make no exceptions where environmental laws and regulations require specific materials to be recycled or removed from the waste stream.

f. Develop appropriate management controls for recyclable materials that may be hazardous, such as lead-acid batteries.

g. Prior to any source separation effort, request from DRMO an estimate of the market for recovered materials, including estimated returns from sales and the timing of market demand.

h. Screen QRP materials for reutilization, transfer, and donation prior to selling directly.

i. Consider the following additional materials in the development of recyclable material markets:

- (1) Glass.
- (2) Plastic.
- (3) Newspaper from small housing areas.
- (4) Scrap wood.
- (5) Corrugated containers from commercial establishments generating less than 10 tons of waste per month.

(6) Other waste as market demand arises (e.g., carpet).

j. Ensure that United States trade security control policies are followed, prior to selling firing range-expanded brass or mixed metals gleaned from firing range cleanup that do not require demilitarization and that are MLIs or SLIs.

k. Update economic analysis and market determinations as market conditions change significantly, and maintain such records on file at the managing installation.

l. To maximize recycling, consider handling recyclable materials that are not profitable for a QRP through SW contracts where the cost in the contract to have the materials recycled is less than the cost in the contract to dispose of the material. Ensure that the contract includes record keeping of quantities and types of material recycled in this manner.

#### 4. Marine Corps Records

a. To determine SW management requirements, each installation must retain records of disposed SW and materials recycled for the current year and the two preceding years, per reference (aa), SSIC 11350.1.

(1) Each installation must determine what actions will be, or have been, taken to adopt source separation requirements. When an installation decides not to source separate, such a decision must be based on a fully supported analysis (see paragraph 17104.5c(4)).

(2) Each installation shall keep records for SW, including the actual weight, material and product type, the disposition (e.g., landfilled, incinerated), cost, and revenues. If the actual weight is not available, the volume can be estimated and converted to weight using accepted densities of various wastes.

(3) Each installation shall keep records for recycled wastes, including the actual weight, types (e.g., glass, metal), proceeds from the sale of recyclable materials, and avoided costs for disposal.

(4) Installations shall maintain records for the quantities of waste disposed and recycled by construction and demolition (C&D) contractors. C&D materials disposed of in MSWLFs or C&D landfills are not considered recycled; however, materials recycled by a C&D contractor shall be counted as recycled when calculating the installation's diversion rate. Materials recycled by a C&D contractor shall be counted as recycled when calculating the installation's diversion rate. . Installations shall maintain these records per reference (aa) SSIC 4200.1b(1) and 4200.1b(2) as appropriate.

b. After establishing an organized QRP, or if recycling is concurrent with such program development, the installation must determine whether to sell material directly or through their DRMO. If material is to be sold directly, the QRP procedures must address the identification of recyclable materials, excluded materials, and other QRP materials. The installation must coordinate with DRMO, when selling through DRMO, to determine whether

the specific material to be sold actually is recyclable material. Refer disputes through the chain of command. Proceeds from sales, regardless of the type of sales transaction, are returned to the installation as described below:

(1) All Marine Corps installations, including those that operate under NWCFF, may participate in the program.

(2) Deposit proceeds from the sale of recyclable materials at an installation with a QRP to account number 17F3875.27RM "Budget Clearing Account (suspense)" as instructed by reference (n) (and appendix L in reference (o)). Accumulated funds in account number 17F3875.27RM are not affected by fiscal year end, so that proceeds acquired during one fiscal year may be carried forward and merged with proceeds of subsequent fiscal years. The proceeds are segregated within the account through associations with the bureau control number (base unit identification code) to allow accounting as to the amounts collected and their disposition.

(3) Withdraw proceeds first from account number 17F3875.27RM to cover costs of operations, maintenance, and overhead for the processing and handling the recyclable materials (including the cost of any equipment purchases for recycling purposes). Military personnel must not be reimbursed from the proceeds of this account. If funds from account 17F3875.27RM are not sufficient to cover the costs of processing and handling these recyclable materials within a fiscal year, funds normally available for operations and maintenance will be used to cover the remainder.

(4) If a balance remains, not more than 50 percent of that balance may be used at the installation for projects for pollution abatement, energy conservation, and occupational safety and health activities. The cost of these projects may not exceed 50 percent of the maximum amount authorized for a minor construction project. Pollution abatement, energy conservation, and occupational safety and health projects must not be included in the normal minor construction program if sufficient recycling proceeds are available at the installation.

(5) Any remaining balance may be transferred to one or more of the local nonappropriated fund instrumentalities supporting MCCS activities at the installation as defined in existing DON regulations.

(6) If the balance of an installation's proceeds remaining in account number 17F3875.27RM exceeds \$2 million at the end of a fiscal year, deposit the amount in excess of \$2 million into the U.S. Treasury as miscellaneous receipts.

5. EPR Portal Solid Waste Annual Data Call replaced the Solid Waste Pollution Prevention Annual Data Summary (SW P2ADS). All installations that generate more than one ton per day of SW shall submit their SW data per CMC guidance provided annually in September. The SW data for the previous fiscal year must be submitted via the EPR Portal each year in November to the Naval Facilities Engineering Service Center (NFESC) and to CMC (LF). The data call tracks the progress in meeting DOD Measures of Merit SW goals.

6. Technical Assistance. Naval Facilities (NAVFAC) Atlantic and NAVFAC Pacific (which are Echelon III level) and their subordinate Facilities Engineering commands at the Echelon IV level will provide technical assistance to Marine Corps installations upon request.

17201. MARINE CORPS INSTALLATIONS IN FOREIGN COUNTRIES. Outside the United States, the disposition of recyclable and other QRP materials derived from goods that have been imported duty free, is accomplished in accordance with the status of forces, surplus or excess property agreements, or other international agreements with host nations.

CHAPTER 17

SOLID WASTE (SW) MANAGEMENT AND RESOURCE RECOVERY

SECTION 3: RESPONSIBILITIES

17300. CMC (LF)/COMMANDER MCICOM

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to SW management and resource recovery and uniformly apply Marine Corps policy as set forth in this Manual.
2. Ensure compliance for recycling programs and procedures in accordance with the specifications provided in reference (y).
3. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies, as required.
4. Conduct special environmental compliance and protection studies with regard to SW management to assist in establishing policy or initiating actions.
5. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to SW regulations.
6. Track Marine Corps progress toward meeting established SW minimization goals, using the EPR Portal data.

17301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Identify and submit to CMC (LF) project documentation and funding requests for SW management and resource recovery facilities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with SW management and resource recovery requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives are evaluated, and life-cycle cost impacts are assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all SW management and resource recovery projects.
3. Ensure that a base or station order is written implementing local SW management and resource recovery policies.
4. Establish source separation programs and resource recovery facilities as feasible, and implement their operation through base or station orders.
5. Determine whether QRP or recycling sales programs are applicable.

6. Obtain applicable state or local permits and licenses for the site location and operation of onsite landfills.
7. Ensure that SW is disposed of according to applicable Federal, state, and local requirements.
8. Develop a system (e.g., listing, dumpster markings) to notify all base and unit personnel of the types of SW that may be placed in SW collection containers, and ensure that only those acceptable wastes are placed in the containers.
9. Ensure that off-base landfills receiving Marine Corps SW are licensed and are operating under applicable permits and regulations.
10. Ensure that Marine Corps installations located in the United States and its territories and possessions comply with applicable Department of Agriculture inspection and disposal requirements if they receive garbage from vehicles and/or aircraft arriving from outside the United States. These regulations are designed to prevent the spread of plant pests and animal diseases.
11. Develop SW management plans, including source reduction and recycling programs and resource recovery facilities as required.
12. Ensure that recyclable material direct sales performed by the QRP are performed in accordance with applicable laws and guidance.
13. Submit SW data annually to NFESC and the CMC (LF) via the EPR Portal.
14. Ensure the base is taking necessary measure to meet the most current DOD SW reduction goals.

17302. CG/CO OF MARINE CORPS COMMAND/UNIT AND TENANT TRAINING

1. Cooperate with and encourage the organization, lessor, or host activity to implement SW management programs as outlined in this chapter.

REFERENCES

- (a) Public Law 89-272, "Solid Waste Disposal Act of 1965," October 20, 1965
- (b) 42 U.S.C. 6901 et seq.
- (c) 40 CFR 240
- (d) 40 CFR 243
- (e) 40 CFR 246
- (f) 40 CFR 247
- (g) 40 CFR 257
- (h) 40 CFR 258
- (i) 32 CFR 172
- (j) 40 CFR 262
- (k) DOD Directive 4160.21-M, "Defense Materiel Disposition Manual," August 18, 1997
- (l) DOD Directive 4160.21-M-1, "Defense Demilitarization Manual," October 21, 1991; Incorporating Change 1 - February 14, 1995
- (m) 10 U.S.C. 2577
- (n) MCO 7301.116
- (o) MCO 7300.21
- (p) SECNAVINST 4860.44, "Commercial and Industrial Type Activities"
- (q) 10 U.S.C. 484 et seq.
- (r) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (s) Executive Order 13423, "Implementing Instructions," March 27, 2007
- (t) 42 U.S.C. 6903
- (u) Executive Order 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," September 14, 1998
- (v) 15 CFR 774
- (w) MCO 4860.3
- (x) NAVFAC P-442, "Economic Analysis Handbook"

(y) DOD Personal Property Disposal and Recycling: Guidance for Personal Property and Disposal and Recycling Operations, August 18, 1993

(z) Department of the Navy GP Program Implementation Guide, February 2009:  
[http://www.p2sustainabilitylibrary.mil/p2\\_documents/don\\_gpp\\_implementationguide020509.pdf](http://www.p2sustainabilitylibrary.mil/p2_documents/don_gpp_implementationguide020509.pdf)

(aa) SECNAV M-5210.1

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CHAPTER 18

UNDERGROUND STORAGE TANKS (UST)

SECTION 1: INTRODUCTION

18100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with statutory requirements for USTs containing petroleum products and HS.

18101. APPLICABILITY. See paragraph 1101.

18102. BACKGROUND. The 1986 amendments to reference (a) included provisions to prevent releases from USTs, mandating a comprehensive regulatory program. A UST is defined as any combination of tank and underground pipes in which 10 percent or more of the volume of the tank is beneath the ground surface (including associated underground piping).

18103. FEDERAL STATUTES

1. HSWA of 1984 (Public Law 98-616)

a. The HSWA extended and strengthened the provisions of the SWDA as amended by reference (a). Subtitle C of reference (a) regulates USTs that contain HW. Subtitle I of the HSWA provides for the development and implementation of a comprehensive regulatory program for USTs containing HSWs or petroleum products, and releases of those substances into the environment. HSWs regulated under subtitle I include any substance listed in section 101(14) of the reference (b).

b. The HSWA requires that Federal installations comply with all Federal and applicable state and local requirements regarding USTs, including payment of registration fees and permit fees when such fees are not taxes.

c. Federal regulations outline procedures by which the EPA may approve state programs to replace the Federal UST requirements, if those state programs have standards that are no less stringent than the Federal requirements and provide adequate enforcement of those standards. States with an approved UST program will have primary enforcement responsibility in their states. Currently, most states have UST regulatory programs in place. Until the EPA approves a state program, installations shall comply with all applicable provisions of both the Federal and state UST programs. After the EPA approves a state's program, installations must comply with applicable state requirements.

d. Section 9002 of reference (a) bars installing unprotected tanks after May 7, 1985. All new USTs must meet corrosion protection requirements. In addition, the EPA or designated state agency must be notified of the presence of existing regulated USTs. Provisions in the new UST program required the EPA to develop regulations for new tanks including design, construction, installation, release detection, and compatibility standards. This rule was promulgated September 23, 1988, and became effective December 22, 1988 (per reference (c)).

2. SARA of 1986 (Public Law 99-499). Section 205 of SARA amended the SWDA by defining the term "petroleum" to mean petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute (psia)). Also, section 205 of SARA added provisions related to state UST inventories and financial responsibility for UST owners (i.e., the EPA/state authority for corrective actions, the EPA/state cost recovery for remedial actions, and state/political subdivision rights to adopt and enforce more stringent requirements than Federal requirements on USTs).

18104. REQUIREMENTS

1. General Tank Standards and Operating Requirements. UST regulations applicable to Federal installations are found in reference (c), subparts A-G. A brief description of the requirements follows:

a. In reference (c), subpart A gives the definitions for the UST program and applicability of the regulations to each system.

b. For a tabular summary of the basic requirements and when they must be operative, see appendix P. Appendix Q provides information on responding to releases from USTs.

c. Federal UST regulations (reference (c)) apply to both existing (installed before December 1988) and new (installed after December 1988) tanks and the associated piping network. Tank standards stipulated under these regulations, including corrosion protection and spill/overflow prevention, were applicable for new tanks or by December 22, 1998, via upgrade or retrofit for existing tanks. Tanks unable to meet Federal UST standards shall be closed in compliance with subpart G of reference (c).

d. Wastewater treatment tank systems, USTs containing radioactive material (reference (d)), UST systems that are part of an emergency generator system at nuclear power generation facilities, airport hydrant fuel distribution systems, and UST systems with field-constructed tanks are deferred from the requirements of reference (c) except for subpart F governing release response and corrective action requirements.

e. Monitor transfer operations to ensure that spilling or overflowing does not occur.

f. Maintain and inspect corrosion protection measures, including cathodic protection, to ensure proper operation. A cathodic protection tester should perform cathodic protection maintenance activities.

g. UST systems must be made of, or lined with, materials compatible with substances stored in the UST system.

h. Conduct repairs to UST systems per a code of practice developed by a nationally recognized association or an independent testing laboratory; repairs may be made by the manufacturers' authorized representatives. Test repaired tanks operability for tightness and corrosion protection, and maintain records of all repairs for the remaining operating life of the UST system. Internal

inspections of repaired tanks, using appropriate confined space entry procedures, may be permitted in lieu of tightness testing.

i. Maintain written records demonstrating compliance with operations and maintenance requirements.

j. The owner/operator must report all existing USTs and installation certifications for new UST systems to the proper agency. Owners/operators must also report releases, spills, and corrective actions planned in cleanup procedures.

## 2. Release Detection

a. Subpart D of reference (c) identifies release detection requirements.

b. In addition to compliance with tank standards identified under sections 20 and 21 of reference (c), new, existing upgraded, and existing nonupgraded tanks and pipes must provide methods for release detection. Such requirements are to be phased in for existing tanks and piping systems, while new tanks and associated piping networks must provide methods for release detection upon installation. The schedule for phasing in release detection requirements regarding existing systems is based on the age of the tank and piping. The phase-in process began December 22, 1989, for tanks 25 years old or older (see appendix P). As of December 22, 1993, all piping systems and existing tanks must have complied with release detection requirements.

c. Specific types of release detection methods to be employed are defined in subpart D of reference (c) (see appendix R). The owner/operator must choose from the options outlined in these regulations: release detection will consist of one of the monthly monitoring methods as defined under section 43(d)-(h) of reference (c) or tank tightness testing in combination with monthly inventory control. Tank tightness testing is required annually for existing tanks not yet meeting upgrade requirements and can only be used to meet release detection requirements until December 22, 1998. Tank tightness testing at intervals of 5 years is allowed for new tanks or tanks upgraded with corrosion protection until December 22, 1998, or 10 years after installation/upgrade, whichever date is later. The employment of release detection methods required under subpart D of reference (c) are necessary for the life of the tank and piping system.

d. While the use of a release detection option that involves the use of tank tightness testing may appear to be the less difficult way to meet initial regulatory requirements, it may not be the most prudent. This is especially true if there are plans to upgrade tanks to meet long-term storage needs. It is wise in such cases to consider the use of long-term monitoring methods, as opposed to tank tightness testing that is considered to be an interim release detection option only.

e. Maintain records documenting compliance with release detection requirements for 5 years, or a length of time to be determined by the applicable regulatory agency.

## 3. Release Reporting, Investigation, and Confirmation

a. Subpart E of reference (c) outlines release reporting, investigation, and confirmation requirements.

b. A suspected release from a UST system must be reported to the state implementing agency within 24 hours. The following discoveries constitute a suspected release:

- (1) Sudden loss of product.
- (2) Erratic behavior of dispensing equipment.
- (3) Unexplained presence of water in a tank.

(4) Discovery of free product or vapor at the site or surrounding area, or when release detection methods indicate a release occurrence. Exceptions to the reporting requirement include: when tank system dispensing/pumping equipment is found to be defective but not leaking and can be replaced or repaired immediately; or in the case of inventory control, if the second month of data does not confirm the initial results; or when the monitoring device is found to be defective and is immediately repaired or replaced and recalibrated, and additional monitoring does not confirm the initial results. Follow the guidance in chapter 7 of this Manual for reporting HS releases.

c. The regulatory agency may require off-site impact determinations under certain circumstances, such as those described in section 51 of reference (c).

d. Suspected releases of regulated substances must be investigated and confirmed within 7 days by conducting a UST system test or another confirmation procedure established by the state. Further investigation is not required if a system test indicates a leak does not exist and no environmental contamination is present. If system testing indicates that no leak exists but environmental contamination is the cause for suspecting a release, a site check, per section 52(b) of reference (c) is required.

e. UST system spills or overfills must be immediately cleaned up and reported to the state within 24 hours for spills or overfills of:

- (1) Over 25 gallons or if a petroleum sheen is present on nearby surface water for tanks containing petroleum products.
- (2) HSs exceeding reportable quantities under reference (b).

f. If cleanup cannot be accomplished within 24 hours, immediately notify the regulatory agency.

g. Spills and overfills resulting in the release of petroleum that are less than 25 gallons must be contained immediately and cleaned up within 24 hours. If cleanup cannot be accomplished within 24 hours, immediately notify the regulatory agency.

#### 4. Release Response and Corrective Action

a. Subpart F of reference (c) outlines release response and corrective

action requirements.

b. Upon discovery of a confirmed or suspected release, owners and operators must notify the EPA and appropriate state agencies within 24 hours. Upon confirmation of a release, owner/operators must stop further release of the regulated substance from the UST system and identify and mitigate fire, explosion, and vapor hazards. Confirm the suspected release within 7 days of the initial discovery (per section 280.52 of reference (c)).

c. The following initial abatement measures are required for a confirmed release, as identified in section 62 of reference (c):

(1) Remove as much of the regulated substance as necessary from the UST system to prevent further release.

(2) Remedy hazards posed by UST releases. Hazards include contaminated soils below ground level and migration of the regulated substance into surrounding soils and groundwater.

(3) Continue to monitor and mitigate any fire and safety hazards.

(4) Measure prudently for the presence and extent of releases around the UST site.

(5) Alleviate any hazards posed by contaminated soils and materials that were excavated or exposed as a result of any corrective or investigative activities. The owner/operator must comply with applicable Federal, state, and local regulations regarding disposal or treatment of these substances.

(6) Report initial abatement steps within 20 days.

d. The EPA or state agency requires the submission of an initial site characterization report which includes at a minimum the determination of: the nature and extent of the release; the estimated quantity of the release; a free product assessment; and information on surrounding population, geology, water supply, wells, utilities, climate, and land use.

e. The site characterization report must be submitted to the regulatory agency within 45 days of release confirmation or another reasonable time as determined by the regulatory agency.

f. If free product is discovered, the owner/operator must begin abatement of it as soon as possible and to the maximum extent practicable. All free product abatement and disposal practices must comply with those listed in section 64 of reference (c).

g. Investigate soil and groundwater contamination to determine the extent of the contamination plume. Submit the information obtained during the investigation to the proper regulatory agency. Submission of a corrective action plan to the appropriate regulatory agency may be required, with additional information on the condition and extent of contaminated soil, groundwater remediation actions, and demonstration that adequate protection to human health, safety, and the environment is being provided. The regulatory

agency will review this corrective action plan to determine if it will adequately protect human health, safety, and the environment. The regulatory agency may approve the plan or make any modifications prior to implementation.

h. The regulatory agency must notify members of the public for each confirmed release that requires a corrective action plan and make the corrective action plan available to the public, upon request. Additionally, the public must be notified if the selected corrective action fails to meet the established cleanup goals.

#### 5. Out-of-Service UST Systems and Closure

a. The regulations applicable to this section are located in subpart G of reference (c).

b. Temporary closure of a UST system requires continued operation and maintenance of corrosion protection and release detection measures. Continue to maintain corrosion protection even when the UST system is empty.

c. Temporary closure of three months or more requires that vent lines be left open and all other lines, pumps, manways, and ancillary equipment be capped and secured.

d. Temporary closure of more than 12 months requires permanent closure of the UST system if it does not meet either new UST performance standards or corrosion protection upgrading standards. The regulatory agency may grant an extension of the 12-month, temporary closure period.

e. Owners/operators must notify the implementing agency 30 days prior to the permanent closure or change-in-service of a UST. Continued use of a UST to store a nonregulated substance is considered a "change-in-service." USTs must be emptied and properly cleaned prior to permanent closure or change-in-service, and closed tanks must be removed or filled with an inert solid and all tank openings must be capped. Owners/operators must perform a site assessment on USTs which undergo permanent closure or change-in-service. The site assessment must measure for the presence of contaminants in the places where they most likely will be present and detected. USTs which use proper groundwater or external vapor monitoring systems, which are operating in accordance with the applicable requirements, do not need to perform a site assessment if no release is detected at closure/change-in-service.

f. Site assessment of an excavation zone and compliance with closure requirements may also apply to UST systems permanently closed before December 22, 1988, if the regulatory agency determines that the UST may pose a current or potential threat to human health, safety, or the environment.

g. Maintain records documenting compliance with closure requirements for a period of three years after closure.

6. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

18105. TERMS AND DEFINITIONS

1. Aboveground Release. Any release of a regulated substance from a UST to the surface of the land or surface water. This includes, but is not limited to, release from the aboveground portion of a UST system and aboveground releases associated with overfill and transfer operations as the regulated substance moves to or from a UST system.
2. Ancillary Equipment. Any devices including, but not limited to, piping, fittings, flanges, valves, and pumps used to distribute, measure, or control the flow of regulated substances to and from a UST.
3. Cathodic Protection. A technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.
4. Cathodic Protection Tester. A person who can demonstrate understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, the person must have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.
5. Connected Piping. All underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.
6. Corrosion Expert. A person who, by reason of thorough knowledge of physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be accredited or certified as being qualified by the National Association of Corrosion Engineers, or must be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.
7. Excavation Zone. The volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.
8. Existing Tank System. A tank system used to contain an accumulation of regulated substances, or for which the installation has commenced on or before December 22, 1988. The installation is considered to have commenced if:
  - a. The owner or operator has obtained all Federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system.
  - b. Either a continuous on-site physical construction or installation

program has begun.

c. The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction at the site or installation of the tank system to be completed within a reasonable time.

9. Flow-through Process Tank. A tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of material prior to their introduction into the production process or for the storage of finished products or byproducts from the production process.

10. Free Product. A regulated substance that is present as a nonaqueous phase liquid (i.e., liquid not dissolved in water).

11. HS UST System. Any UST system that contains an HS defined in section 101(14) of reference (b) (but not including any substance regulated as an HW under subtitle C of reference (a) or any mixture of such substances and petroleum in a UST system that does not constitute a petroleum UST system.

12. Heating Oil. Petroleum that is Nos. 1, 2, 4, and 5 (light and heavy), and 6 (technical grades), other residual fuel oils (including Navy Special Fuel Oil and Bunker C), and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces. Oil, as defined in reference (e) , is oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, or oil refuse.

13. Hydraulic Lift Tank. A tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

14. Liquid Trap. Sumps, well cellars, and other traps used in association with oil and gas production, and gathering and extraction operations (including gas production plants) for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

15. New Tank System. A tank system that will be used to contain an accumulation of regulated substances and which installation commenced after 22 December 1988.

16. Operator. Any person in control of or having responsibility for the daily operation of a UST system.

17. Overfill Release. A release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

18. Owner. In the case of a UST system in use on 8 November 1984 or brought

into use after that date, any person who owns a UST system used for storage, use, or dispensing of a regulated substance; and, in the case of any UST system in use before 8 November 1984, but no longer in use on that date, any person who owned the UST immediately before the discontinuation of its use.

19. Petroleum. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 psia).

20. Petroleum UST System. A UST system that contains petroleum or a mixture of petroleum with minimum quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

21. Regulated Substance

a. Any substance defined in section 101(14) of reference (b), but not including any substance regulated as an HW under subtitle C of reference (a).

b. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 psia).

c. The term "regulated substance" includes, but is not limited to, petroleum and petroleum-based substances consisting of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

22. Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. The term excludes:

a. Any release that results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons.

b. Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine.

c. Release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in reference (d). If such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of reference (d), or for the purposes of section 104 of reference (b), or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or section 302(a) of reference (f).

d. The normal application of fertilizer.

23. Release Detection. Determining whether a release of a regulated substance has occurred from a UST system into the environment or into the interstitial

space between the UST system and its secondary barrier or containment.

24. Septic Tank. A watertight, covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such a receptacle is distributed through the soil, and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

25. Stormwater or Wastewater Collection System. Piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water runoff resulting from precipitation, or domestic, commercial, or industrial wastewater. The collection of stormwater and wastewater does not include treatment except where incidental to conveyance.

26. USTs. All tank systems containing regulated substances for which the tank volume, including piping, is 10 percent or more beneath the surface of the ground. The following tank systems are excluded from Federal UST regulations:

a. Any UST system holding an HW listed or identified under subtitle C of reference (a), or a mixture of such an HW and other regulated substances.

b. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under sections 402 or 307(b) of reference (g).

c. Equipment or machinery that contains regulated substances for operational purposes, such as hydraulic lift tanks and electrical equipment tanks.

d. Any UST system that has a capacity of 110 gallons or less.

e. Any UST system that contains a minimum concentration of regulated substances.

f. Any UST emergency spill or overflow containment system that is expeditiously emptied after use.

g. Any residential tank containing motor fuel for noncommercial use with capacity of 1,100 gallons or less.

h. Any tank storing heating oil for consumptive use on the premises.

i. Any tank system on or above the floor of underground areas, such as basements or tunnels.

j. Any septic tank, stormwater, or wastewater collection system.

k. Any flow-through process tank.

27. Upgrade. The addition or retrofit of a system with cathodic protection, lining, or spill and overflow controls to improve the ability of a UST system to prevent the release of product.

28. UST System or Tank System. The UST and any connected underground piping,

underground ancillary equipment, and containment system, if any.

29. Wastewater Treatment Tank. A tank that is designed to receive and treat influent wastewater through physical, chemical, or biological methods.

UNDERGROUND STORAGE TANKS (UST)

SECTION 2: MARINE CORPS POLICY

18200. COMPLIANCE WITH UST REQUIREMENTS. The Marine Corps UST program policy is to comply with all Federal and applicable state and local regulations pertaining to the operation and management of USTs. Additionally, Marine Corps installations must develop long-term management plans to establish procedures for achieving and maintaining compliance, as well as to prioritize corrective actions against environmental risk.

18201. COMPLIANCE WITH UST INVENTORY. One of the most important initial steps in meeting UST regulatory requirements is to develop adequate baseline data regarding an installation's tank population. Marine Corps installations must maintain a complete and accurate UST inventory. Complete inventories must have all applicable data elements listed for each system record. Update data elements to reflect significant changes in the UST condition, especially at critical points during the useful life of each UST (e.g., following installation, when upgraded or repaired, if a release occurs, at closure, etc.). Such information is necessary not only to develop and maintain a rational UST compliance strategy, but also to apply accurate, appropriate funding sources to required UST actions.

18202. COMPLIANCE WITH UST MANAGEMENT

1. Compliance with UST regulations is necessary to reduce environmental liability but results in far-reaching management and cost implications to the Marine Corps. A long-term approach to reducing UST-related liability and the associated costs requires the development of installation UST management plans. These require Marine Corps installations to look beyond the specific regulatory compliance tasks and consider a comprehensive approach to effectively reduce environmental risk stemming from storage needs.

2. The primary goal of the UST management plan is to design a strategy to achieve and maintain compliance with regulatory requirements. An important secondary objective of the management plan is to allow installations to utilize UST systems as efficiently as possible, therefore reducing environmental risk while minimizing costs associated with compliance. Marine Corps UST management plans should include the following:

- a. A general UST inventory description and goal statement.
- b. A consolidation and reduction plan of existing UST systems to meet storage needs while minimizing environmental risk.
- c. An evaluation of alternate storage vessels such as aboveground tanks with proper spill prevention/containment or vaulted underground tanks to replace out-of-date USTs. Management plans should include economic considerations during the discussion of storage alternatives.
- d. A plan-of-action and milestones to replace/upgrade active USTs and to

properly close abandoned USTs. Management plans should include a discussion of specific projects necessary to meet management goals.

e. Procedures to ensure continued compliance into the future. Plans should include assignment of responsibilities to parties who will carry out compliance tasks such as inventory control, leak detection maintenance, corrosion protection maintenance, release reporting, and follow-up.

f. A description of recordkeeping practices to be maintained on all aspects of UST management. Records must document the useful life of the UST and include installation, registration, maintenance, upgrades, closure, operator training, and release reporting from discovery through cleanup and UST closure. These records must be retained per reference ( ), SSIC 5090.4.

3. In reference to the management of deferred UST systems, as defined in paragraph 18104.1d and section 11 of reference (c) applies:

a. No person may install a UST system listed in section 10(c) of reference (c) for the purpose of storing regulated substances unless the UST system (whether of single- or double-wall construction):

(1) Will prevent releases due to corrosion or structural failure for the operational life of the UST system.

(2) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the release of any stored substance.

(3) Is constructed or lined with material that is compatible with the stored substance.

b. Notwithstanding paragraph 18202.3a of this section, a UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life.

c. Owners and operators must maintain records that demonstrate compliance with the requirements of this paragraph for the remaining life of the tank. These records must be retained per reference (i), SSIC 5090.4 or the remaining life of the tank, if longer.

#### 18203. FUNDING CATEGORIES

##### 1. Primary Funding Categories for UST Closures, Replacements, Upgrades

a. Operations and Maintenance. Includes locally managed funds for repair and construction projects (M1/R1) and centrally managed funds for major repair and minor construction projects (M2/R2). Investigations and other engineering support use (P) funds. Refer to reference (h) and chapter 3 of this Manual for further information.

b. MILCON. Used for projects that exceed minor construction limits. Includes entire tank replacement for existing "contamination-free" sites or new

tank construction complying with reference (j).

c. DLA Energy. Used for projects that involve DLA Energy-owned fuel, DLA Energy funds can be used for environmentally related minor construction, major repair, and MILCON projects, as well as certain recurring costs.

d. DERA. Used for the cleanup of environmental contamination from USTs. Eligibility for DERA funding is linked with initial leak detection required by the Federal regulations. If site contamination is discovered prior to or during the initial leak detection that occurred no later than 22 December 1993, the site investigation and cleanup are eligible for DERA funding. After initial leak detection is completed and has shown that a system has not caused a release to the environment, any cleanup of subsequent site contamination caused by that system will not be eligible for DERA funds.

e. Base Realignment and Closure. Used only when UST projects are related to the closure or realignment of an installation.

f. Japanese Facility Improvement Program. Used only at Japanese installations when a UST action is related to a project approved by Japanese officials with the purpose of improving conditions for local citizens.

2. Primary Funding Categories for Release Detection and Maintenance. Release detection and regular maintenance is an ongoing compliance requirement for new and existing tank systems. Installation funding requests to address these requirements will compete with all other similar requests. Therefore, to ensure that adequate funds are available, each installation should budget needed funds locally.

3. Primary Funding Categories for Release Response. Anticipated studies such as site characterization for closing USTs should be budgeted for during development of the removal/replacement projects. Initial response abatement and free product removal actions are viewed as similar to emergency response. Therefore, resultant costs of these actions must be absorbed by local installation operating funds. Response to spills and releases of DFSC-owned fuel which occur after October 1992 may be funded by DFSC on a reimbursable basis.

#### 18204. COMPLIANCE WITH UST CLOSURE DOCUMENTATION

1. The Marine Corps has permanently closed many USTs to date and will continue to do so in order to meet regulatory requirements and eliminate unneeded storage capacity. Proper documentation of UST removals and in-place closures is very important to ensure compliance, reduce environmental liability, avoid duplicative effort, and show progress and due diligence.

2. Marine Corps installations must record and maintain specific, detailed information for every UST taken out of service. Such information should be organized into a written UST closure report. Appendix S outlines a typical UST closure report.

a. Release Reporting Requirements. Marine Corps personnel must contain and clean up all spills or leaks of any size. Marine Corps personnel must

report within 24 hours all confirmed or suspected leaks based on monitoring, or spills and overfills of petroleum exceeding 25 gallons, to the EPA or proper state agency. Such releases must also be reported to the CMC (LF). Utilize the message format provided in appendix E.

b. Release Investigation and Confirmation. Immediate investigation should be initiated using the following methods (or others specified by the state or the EPA):

(1) Perform inventory control for an additional month (if inventory reconciliation is the reason for suspecting a leak).

(2) If a leak is still suspected, tank/pipe isolated tightness tests must be used to locate the leak.

(3) If the UST system fails a tightness test or if environmental monitoring was the original reason to suspect a release, personnel must perform a site check.

(4) Upon release confirmation, report this information to the appropriate regulatory agencies and proceed with release response and corrective action as outlined in section 60 through section 67 of reference (c), or equivalent state regulations.

c. Small leaks or spills can sometimes be cleaned up without removing the tank or pipeline. In many cases, loose joints and connections cause leaks while the general condition of the tank or pipeline is good. In such cases, the tank or pipeline can be repaired per section 33 of reference (c) and returned to service.



CHAPTER 18

UNDERGROUND STORAGE TANKS (UST)

SECTION 3: RESPONSIBILITIES

18300. CMC (LF)/COMMANDER MCICOM

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to USTs and uniformly apply Marine Corps policy as set forth in the Manual.
2. Monitor installation compliance with upcoming UST upgrade requirements.
3. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
4. Conduct special environmental compliance and protection studies with regard to USTs to assist in establishing policy or initiating actions.
5. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to UST regulations.

18301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Identify and submit to the CMC (LF) project documentation and funding requests for UST systems that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with UST requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all UST projects. Pay appropriate Federal, state, and local fees.
3. Ensure that notification forms for USTs are completed and forwarded to the EPA or the appropriate state agency. Ensure that an accurate UST inventory is maintained.
4. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements (see chapter 15 of this Manual).
5. Accomplish leak detection and product inventory requirements, recordkeeping, and operation of monitoring systems required by Federal, and applicable state, and local UST laws and regulations.
6. Comply with Federal, and applicable state, and local laws and regulations concerning the construction of new USTs, the upgrading of existing tanks, and the removal and closure of abandoned/unneeded tanks.

7. Identify resources required to meet the UST requirements in the POM, budget submittals, and the Annual Operational Plan.
8. Develop and implement a comprehensive, written UST management plan to facilitate compliance, and to reduce long-term costs associated with compliance.
9. When necessary, request technical assistance for UST management from the NAVFAC EFD/EFA or other available agencies for leak detection assistance, design assistance for new USTs, and estimation of resource requirements for corrective actions.
10. Ensure that coordination occurs as appropriate with the Safety Office in matters relating to UST cleaning and removals.
11. Ensure that a base or station order is written to implement specifications set forth in this chapter. This requirement can be accomplished either by writing an ECPSOP document to implement all environmental requirements or by writing a separate base order to implement specifications of this chapter alone.

REFERENCES

- (a) 42 U.S.C. 6901 *et seq.*
- (b) 42 U.S.C. 9601 *et seq.*
- (c) 40 CFR 280
- (d) 42 U.S.C. § 2011 *et seq*
- (e) 40 CFR 122.2
- (f) 42 U.S.C. §§ 7901 *et seq.*
- (g) 33 U.S.C. §§ 1251 *et seq.*
- (h) MCO P11000.5G W/CH 1
- (i) SECNAV M-5210.1
- (j) MCO P11000.12C W/CH 1

CHAPTER 19

POLYCHLORINATED BIPHENYLS (PCB) MANAGEMENT

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CHAPTER 19

POLYCHLORINATED BIPHENYLS (PCB) MANAGEMENT

SECTION 1: INTRODUCTION

19100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with requirements under reference (a) for managing PCBs. Additionally, the requirements for managing PCBs under other environmental statutes are briefly addressed. Although this chapter deals primarily with the management of PCBs, it recognizes that occupational safety and health policies and regulations regarding work place exposure must be integrated into the management of PCBs to attain an effective program. Marine Corps installations must comply with all applicable Federal, state, and local regulatory requirements regarding PCB management.

19101. APPLICABILITY. See paragraph 1101 of this Manual.

19102. BACKGROUND. PCBs are either oily liquids or solids that are colorless to light yellow and can exist as a vapor in air. PCBs have been used as viable replacement for combustible insulating fluids, coolants, and lubricants, in transformers, capacitors, and other electrical equipment. PCBs have also been used in fluorescent light ballasts. PCBs are not naturally occurring; however, they are manufactured from a mixture of individual chlorinated compounds and had been marketed under the trade name Aroclor. The manufacture of PCBs was stopped in the United States in 1977. PCBs are regulated under reference (b) as part of reference (a). The PCB regulations and requirements apply to both PCB waste materials and PCBs that are still in use.

19103. FEDERAL STATUTES

1. TSCA of 1976 (15 U.S.C. 2601 et seq.). This Act requires the EPA to regulate and control harmful chemical and toxic substances in commercial use. Congress enacted TSCA to reduce unreasonable risks from chemicals to human health, safety, and the environment. Section 2605 of TSCA provides the EPA with the authority to regulate hazardous chemical substances and mixtures with specific authority for PCB control provided in section 2605(e). Regulations on the manufacturing, processing, distribution in commerce, and use of PCBs are found in 40 CFR 761. Most provisions of the regulations apply only if PCBs are present in concentrations above a specified level as follows:

a. PCBs at concentrations of less than 50 ppm or contaminated surfaces with PCB concentrations of 10 microgram per 100 centimeters squared ( $\mu\text{g}/100\text{ cm}^2$ ) or less;

b. PCBs at concentrations of 50 ppm or greater but less than 500 ppm or contaminated surfaces with PCB concentrations of greater than 10  $\mu\text{g}/100\text{ cm}^2$  but less than 100  $\mu\text{g}/100\text{ cm}^2$ ; and

c. PCBs at concentrations of 500 ppm or greater or contaminated surfaces with PCB concentrations of 100  $\mu\text{g}/100\text{ cm}^2$  or greater. Some states, such as

California, regulate PCBs more stringently than the Federal program, including the regulation of PCBs at concentrations less than 50 ppm or regulation of PCBs as HW. TSCA regulations prohibit PCB manufacturing, processing, importation, and distribution in commerce. TSCA strictly regulates the marking, storage, and disposal of PCBs. TSCA also prohibits importation or exportation of PCBs of any concentrations, for disposal, without an exemption. Regulations issued under TSCA require PCB owners and generators to keep track of their equipment that contain PCBs through reporting activities, providing generator identification numbers, and manifesting PCB wastes. Although the manufacturing of new equipment using PCBs is prohibited, the regulations allow for the continued use of some PCB-containing equipment already in service through the end of its useful life, unless otherwise prohibited. Useful life is generally interpreted to be until equipment failure.

2. RCRA of 1976 (42 U.S.C. 6901 et seq.). RCRA was enacted as an amendment to the SWDA of 1965. RCRA has since been amended by several statutes, more recently, the Land Disposal Program Flexibility Act of 1996. Since TSCA includes toxic chemicals, there are several overlaps with the RCRA regulations. However, while TSCA provides the authority to regulate the disposal on a chemical-by-chemical basis, RCRA provides the authority with the disposal of the waste streams rather than the individual chemicals. PCBs are not considered HWs under Subtitle C of RCRA because they are regulated under TSCA. PCB wastes can become HWs if they are mixed with a listed HW or if they exhibit a characteristic of HW, with certain exemptions. The requirements under RCRA include the prohibition on land disposal of HW containing certain concentrations of PCBs. Additional information on HW management is provided in chapter 9 of this Manual.

3. CERCLA of 1980, as amended (42 U.S.C. 9601 et seq.). This Act was enacted to deal with health and environmental hazards caused by past HW management practices. As amended by the SARA of 1986, the Act gives the Federal Government authority to respond to chemical emergencies and to clean up uncontrolled or abandoned HW sites. Additionally, the Act requires EPA to promulgate revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP establishes the process for determining appropriate removal and remedial action for the Nation's most serious Superfund HW sites. The NCP specifies notification procedures and establishes the national framework for planning and responding to oil discharges and HS releases. Under CERCLA, substances determined to pose a threat to human health are placed on the Superfund NPL in order of potential threat. In the 2005 NPL, PCBs are ranked fifth on the list of 275 HSs. The NCP assigns responsibilities for contingency planning and response to various Federal agencies, including the DOD, and outlines state and local government and public and private interest group participation in these areas.

4. Other PCB-Related Statutes. The CWA establishes the structure for restoring and maintaining the integrity of the Nation's waters and provides framework for all regulations related to the discharge of PCBs and other pollutants into the Nation's waterways. Section 307 defines a list of priority pollutants (including PCBs) for which EPA must establish ambient water quality criteria and effluent limitations. Chapter 20 of this Manual provides additional information. Under the CAA, EPA established national

emissions standards for HAPs to protect the public and lists PCBs as one of 33 HAPs presenting the greatest threat to public health in urban areas. Therefore, PCB incinerators and other authorized PCB activities must be in compliance with the requirements of the CAA. Chapter 6 of this Manual provides detail on the CAA. The Emergency Planning & Community Right-To-Know Act (EPCRA) requires that PCB releases are included in the TRI database maintained by EPA to track the amount of PCBs and other chemicals that are emitted to the air and discharged to surface waters on an annual basis. Additional information on EPCRA are provided in chapter 7 of this Manual.

#### 19104. REQUIREMENTS

##### 1. Use/Reuse

a. Except as authorized in section 30 of reference (b), EPA bans the use of any PCB or PCB item, regardless of concentration, in any manner not totally enclosed (see section 20 in reference (b)).

b. PCB concentrations should be determined on a weight-per-weight basis for nonliquid and on a weight-per-volume basis for liquid, if the density of the liquid is also reported. PCB concentrations may also be established through the following methods:

- (1) Testing the equipment using specific methods.
- (2) Manufacturer's nameplate.
- (3) Service records.

c. No person may avoid any provision specifying a PCB concentration by diluting the PCBs, unless otherwise specifically provided.

d. PCB Concentration Assumptions for Use. The following assumptions may be used to determine PCB concentration without analytical testing:

(1) Transformers with less than three pounds (lb) (1.36 kilograms (kg)) of fluid, circuit breakers, reclosers, oil-filled cable, and rectifiers, whose PCB concentration is not established, are assumed to contain PCBs less than 50 ppm.

(2) Mineral oil-filled electrical equipment manufactured prior to 2 July 1979, and whose concentration is not established, is assumed to be PCB-Contaminated Electrical Equipment. If the electrical equipment was manufactured after 2 July 1979, it is assumed to contain less than 50 ppm PCB. All pole-top and pad-mounted distribution transformers manufactured before 2 July 1979 are assumed to be mineral oil-filled. If the date of manufacture is unknown, assume it to be PCB-Contaminated Electrical Equipment.

(3) A transformer manufactured prior to 2 July 1979 and containing 3 lb (1.36 kg) or more of fluid other than mineral oil and whose PCB concentration is not established, is assumed to be a PCB transformer. If either the date of manufacture or the type of dielectric fluid is unknown, it

is assumed the transformer is a PCB transformer.

(4) Capacitors manufactured prior to 2 July 1979 whose PCB concentration is not established are assumed to contain 500 ppm or greater of PCBs. If a capacitor was manufactured after 2 July 1979, it is assumed to contain less than 50 ppm PCBs. If the date of manufacture is unknown, assume the capacitor contains 500 ppm or greater of PCBs.

e. Use Conditions for Nontotally Enclosed PCB. Per section 30 of reference (b), nontotally enclosed PCBs at any concentration may be used in transformers (other than railroad transformers) for purposes of servicing, including rebuilding these transformers for the remainder of their useful lives, if the following conditions are met:

(1) Marine Corps installations must not use or store for reuse large PCB capacitors, PCB transformers, or electromagnets that pose an exposure risk to human food or animal feed.

(2) As of 1 October 1990, installations may no longer use network PCB transformers with higher secondary voltages (i.e., secondary voltages equal to or greater than 480 volts, including 480/277 volt systems) in, or near, commercial buildings. Such PCB transformers must be reclassified to either PCB-contaminated or non-PCB status by retrofitting or being stored for disposal or disposed.

(3) As of 1 October, 1990, all higher secondary voltage radial PCB transformers and lower secondary voltage network PCB transformers used in, or near, commercial buildings must be equipped with electrical protection to avoid transformer failures caused by high-current faults. In addition to this protection, all radial PCB transformers with higher secondary voltages (i.e., 480 volts and above, including 480/277 volt systems) used in, or near, commercial buildings must have electrical protection to avoid transformer failures caused by sustained low-current faults. Radial transformers that are not provided with electrical protection must have been removed from service by 1 October 1990. Lower secondary voltage network transformers (described above) that are not provided with electrical protection must have been removed from service by 1 October 1993.

(4) It is prohibited to install PCB transformers that have been placed into storage for reuse or that have been removed from another location in or near commercial buildings without retrofitting.

(5) Installations must register all PCB transformers (including pole-mounted PCB transformers and those stored for reuse) with any fire department on-base or off-base able to respond to a fire, and with the EPA.

## 2. Markings

a. Per section 40 of reference (b), mark as illustrated in Figures 19-1 or 19-2, the following PCB items in existence on or after 1 July 1978 that are in use or being removed from use:

(1) PCB containers.

(2) All PCB transformers and equipment containing PCB transformers.

(3) All PCB Large High Voltage Capacitors (LHVC) and equipment containing PCB LHVC should be marked individually. If one or more PCB LHVCs are installed in a protected location such as on a power pole, structure, or behind a fence, the pole, structure, or fence should be marked as illustrated in Figure 19-1, "LARGE PCB MARK - M<sub>L</sub>" and procedures to identify the PCB LHVC should be maintained at the protected location.

(4) PCB large low voltage capacitors (LLVCs).

(5) Electric motors using PCB coolants, hydraulic systems, and heat transfer systems containing PCBs of concentrations between 50 and 500 ppm.

(6) PCB Article containers.

(7) Each storage area used to store PCBs and PCB items.

b. Marking PCB-contaminated electrical equipment is not required.

c. Mark each end and sides of each transport vehicle loaded with PCB containers that contain more than 45 kg (99.4 lb) of liquid PCBs at concentrations of 50 ppm or greater or with one or more PCB transformers.

d. Mark with the statement "No PCBs," each of the following items manufactured between 1 July 1978 and 1 July 1998 that do not contain PCBs:

(1) Fluorescent light ballasts.

(2) PCB LLVC.

(3) Small capacitors normally used in alternating current circuits.

e. Mark as illustrated in Figure 19-1, "LARGE PCB MARK - M<sub>L</sub>", each PCB transformer location, including the vault door, machinery room door, fence, hallway, other means of access, and manhole covers.

### 3. Storage

a. Per the requirements in section 35 of reference (b), PCB Articles may be stored for reuse, in an area not designated as storage for disposal, if the following conditions are met:

(1) No more than five years after the date the PCB Article was originally removed from use or after 5 August 1998, if the PCB Article is properly marked as described in section 19104(2) of this Manual and records, such as date removed from use, future location and use, and date of any schedule repair and servicing, are maintained.

(2) More than five years if a request for an extension to the Regional EPA has been approved in writing.

b. Per section 65 of reference (b), the following requirements apply to

the storage for disposal of PCBs or PCB items at concentrations of 50 ppm or greater:

(1) Any PCB waste should be stored for one year from the date it was removed from service for disposal. PCB waste may be stored for an additional one year (two years total) upon a request, justification, and written approval from the Regional EPA. The installation shall send a copy of the request and EPA approval to CMC (LF).

(2) The storage facility must have adequate roof and walls to prevent rainwater from reaching the stored PCBs and PCB items.

(3) The facility must have an adequate floor with a continuous six-inch-high curbing with a containment volume equal to at least two times the internal volume of the largest PCB article or PCB container or 25 percent of the total internal volume of all PCB articles or PCB containers.

(4) The facility cannot have drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area.

(5) The facility cannot be located at a site that is below the 100-year flood water elevation.

c. Per section 65(c) in reference (b), the following PCB items may be stored temporarily in an area that does not comply with requirements described in paragraph 19104(3)(b)(2) through (5) for up to 30 days from the date of their original removal from service:

(1) Non-leaking PCB articles and PCB equipment.

(2) Leaking PCB articles and PCB equipment if the PCB items are placed in a nonleaking PCB container that contains sufficient sorbent materials to absorb any liquid PCBs remaining in the PCB items.

(3) PCB containers containing nonliquid PCBs such as contaminated soil, rags, and debris.

(4) PCB containers containing liquid PCBs at concentrations of 50 ppm or greater, provided a Spill Prevention, Control and Countermeasure Plan (SPCC) has been prepared for the temporary storage area and the liquid PCB waste is in packaging authorized in the DOT HM Regulations at reference (c) through (d). Information on preparing an SPCC Plan is provided in chapter 7 of this Manual.

d. EPA requires that the date of removal from service be attached to all items in temporary storage.

e. Bulk PCB remediation waste or PCB bulk product waste may be stored at the clean-up site or site of generation for 180 days if conditions in 65(c)(9) of reference (b) are met.

f. All PCB items in storage should be checked for leaks at least every

30 days. Any PCB items discovered to be leaking should be transferred to a nonleaking container immediately. Any spilled or leaked material should be immediately cleaned up and disposed of in accordance with requirements.

4. PCB in Fluorescent Light Fixtures. Light ballasts are the primary electric components of fluorescent light fixtures and are generally composed of a transformer to reduce the incoming voltage, a small capacitor (which may contain PCBs), and possibly a thermal cut-off switch and/or safety fuse. The use of PCBs in ballasts manufactured prior to EPA's 1978 ban on PCBs is not regulated by EPA. All light ballasts manufactured since 1978 that do not contain PCBs should be marked by the manufacturer with the statement, "No PCBs." Light ballasts from the manufacturer labeled "No PCBs" are not regulated by reference (a). For those ballasts manufactured prior to 1978, or for those ballasts that contain no statement regarding PCB content, the installation should assume that they do contain PCBs or determine concentration using methods provided in section 20 of reference (b). The following are TSCA disposal requirements for fluorescent light ballast, depending on concentration:

a. Ballasts that are intact and nonleaking with PCB concentrations of 50 ppm or greater are considered PCB bulk product waste and do not require additional labeling. Manifesting is required for disposal. They may be disposed of in a TSCA incinerator or a TSCA/RCRA landfill.

b. Ballasts that are intact and nonleaking with PCB concentration less than 50 ppm do not require additional labeling or manifesting. They may be disposed as municipal solid waste.

c. Ballasts that are leaking at any PCB concentration (i.e., either less than or greater than 50 ppm) are considered PCB bulk product waste and do not require additional labeling. However, manifesting is required for disposal. They may be disposed of in a TSCA incinerator or a TSCA/RCRA landfill.

5. Transportation. PCBs must be transported as specified in references (c) through (d). All PCB waste being transported within the United States must be accompanied with a manifest, which is signed by the generator and the transporter (see section 208 of reference (b) and section 19104 (8)(e).) In accordance with subpart F of reference (b), all transboundary shipments (i.e., import and export) for disposal of PCBs, 50 ppm or greater, are prohibited without an EPA exemption. Retrograde of U.S. manufactured PCBs from activities outside the United States is not considered export or import of PCBs under reference (a).

#### 6. Disposal

a. Dispose of PCBs and PCB items with concentrations of 50 ppm or greater within one year of the date that they were determined to be PCB wastes. Disposal options and requirements are dependent on the type of PCB waste and are discussed in section 60 of reference (b).

b. For PCB liquids containing more than 50 ppm of PCBs, disposal is generally via high-temperature incinerators permitted by EPA. Certain PCB liquids (at concentrations greater than 50 ppm, but less than 500 ppm) may be

disposed of in a chemical waste landfill or a high-efficiency boiler, provided specific EPA requirements are met.

c. PCB articles such as transformers, PCB capacitors, and hydraulic machines are generally cleaned with an appropriate solvent, and then incinerated. PCB containers must be emptied of fluid and rinsed with appropriate solvent before they can be incinerated or disposed in a MSWLF or a chemical waste landfill.

d. The disposal of PCB remediation waste depends on the size of the site and the concentration at which the PCBs are found. Moderately-sized sites with low residual environmental impact from remedial activities may use self-implementing cleanup and disposal procedures without written EPA approval. Exceptions are discussed in section 61 of reference (b).

e. PCB Bulk Product Waste may be disposed of in a chemical waste or HW landfill, by incineration, or through decontamination. Section 62 of reference (b) identifies other methods of disposal for particular bulk waste that can be disposed of in a municipal landfill or nonmunicipal nonhazardous waste landfill. Materials should be analyzed to determine appropriate disposal methods and their leaching potential.

## 7. Emergency Response and Reporting

a. Immediately report any fire-related incidents involving PCB transformers to the NRC by calling 800-424-8802. PCB transformer owners must take measures to contain and control any potential releases of PCBs and incomplete combustion products into water. Fires involving PCBs can generate extremely toxic reaction products (e.g., dioxins); therefore, if a fire starts, immediately evacuate the building.

b. Report spills that directly contaminate surface water, sewer, drinking water supplies, grazing lands, or vegetable gardens to the appropriate EPA regional office within 24 hours. States, particularly those that regulate PCBs as a HM/HW, may have a more stringent reporting requirement. Failure to properly report such spills can result in both civil and criminal liability.

c. PCBs are hazardous substances under reference (a) and CERCLA, requiring spills to be reported as follows: a spill of a RQ of PCB (RQ = one lb) or greater must be reported to the appropriate response organizations and regulatory agencies within the required deadlines (see chapter 7 and appendix E of this Manual). Releases of a mixture containing PCBs must be reported only when the amount of the PCB component released exceeds the RQ. If the concentration of PCBs in the mixture is unknown, the release must be reported if the total amount of the mixture spilled is one lb or more (see section 125 in reference (b)).

8. Notification of PCB Waste Activity. Installations that handle PCB waste must notify EPA of such activities by filing EPA Form 7710-53 (section 205 of reference (b)). It is illegal for installations to process, store, dispose of, transport, or offer transportation of any PCB wastes without notifying EPA and obtaining an EPA identification number (see section 202 of reference

(b)). Generators who were engaged in PCB waste handling activities on or prior to 5 February 1990 are exempted from notifying EPA. Exempt generators must use the generic identification number "40 CFR 761" or a number assigned to the activity by EPA or a state under RCRA.

9. PCB Recordkeeping and Reporting. Per section 180 of reference (b), the following recordkeeping and reporting requirements apply to PCBs and PCB items in use or projected for disposal:

a. Annual Records and Document Logs. Each installation using or storing at any one time at least 45 kg (99.2 lb) of PCBs in PCB containers, one or more PCB transformers, or 50 or more PCB LHVC or PCB LLVC, must maintain all annual records and a written annual document log of PCB waste disposal activities. These records and the log must be retained per reference (e), SSIC 5090.2e.

(1) Annual records must include all signed manifests for the calendar year; records of inspection, maintenance, repairs and cleanups; and all Certificates of Disposal.

(2) The written annual document log must be completed by July 1 for the previous calendar year. The written annual document log must contain the following specific inventory information for each type of PCB item:

(a) Name, address, and EPA identification number of the facility and the calendar year covered by the annual document log.

(b) Manifest number of every manifest generated by the facility during the calendar year.

(c) Total number by specific type of PCB articles, PCB article containers, PCB containers, PCB transformers, and any PCBs and PCB items in PCB containers.

(d) Total weight in kg of PCBs in PCB article containers and PCB transformers, total weight in kg of contents of PCB containers and PCB article containers, and total weight of PCB LHVC or LLVC remaining in service at the facility at the end of the calendar year.

(e) A record of each telephone call or some form of verification must be kept to confirm receipt of PCBs transported by an independent transporter.

b. Manifesting PCB Wastes. A generator who relinquishes control over PCB wastes for commercial off-site disposal must prepare a manifest using EPA Form 8700-22 (including a continuation sheet if necessary), or the appropriate state manifest. If the generator uses an independent transporter to ship the waste and the generator does not receive a signed copy of the manifest from the disposer or commercial storer within 35 days of shipment, then the generator should contact the transporter and/or disposer to determine the disposition of the waste. If the generator does not receive a manifest from the disposal facility within 45 days of shipment, then the generator must file an exception report with the EPA regional office. Copies

of the manifests must be retained per reference (e), SSIC 5090.2a and per(section 208 in reference (b)).

c. Certificates of Disposal and One-Year Exception Reports. For each shipment of manifested PCB waste, the disposer is obligated to prepare a Certificate of Disposal that must be sent to the generator within 30 days of the date of disposal (section 218 of reference (b)). A generator who manifests PCBs or PCB items to a disposer of PCB waste must submit a One-Year Exception Report to the EPA regional administrator whenever the following criteria are met (section 215 in reference (b)):

(1) The generator has not received a Certificate of Disposal within 13 months from the date of removal from service.

(2) The generator receives a Certificate of Disposal for a disposal date more than one year after the date of removal from service.

10. Environmental Compliance. See chapter 4 of this Manual for information on policy, responsibility, and procedures for achieving compliance with applicable E.O.s, and Federal, state, interstate, and regional statutory and regulatory environmental requirements.

#### 19105. TERMS AND DEFINITIONS.

The regulations at section 3 in reference (b) establish specific definitions for many terms, some of which are listed below:

1. Capacitor. A device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

a. LHVC. An LHVC that contains 1.36 kg (3 lb) or more of dielectric fluid and that operates at 2,000 volts (alternative current or direct current or above).

b. LLVC. An LLVC that contains 1.36 kg (3 lb) or more of dielectric fluid and that operates below 2,000 volts (alternative current or direct current).

c. Small Capacitor. A capacitor that contains less than 1.36 kg (3 lb) of dielectric fluid.

2. EPA Identification Number. A 12-digit number assigned to a facility by EPA upon notification of PCB waste activity.

3. Fluorescent Light Ballast. A device that electrically controls fluorescent light fixtures and that includes a capacitor containing 0.1 kg or less of dielectric.

4. In or Near Commercial Buildings. Within the interior of, on the roof of, attached to the exterior wall of, in an adjacent parking area serving, or within 30 meters of a nonindustrial, nonsubstation commercial building,

including, but not limited to civilian or military personnel assembly buildings, hospitals, and clinics; living quarters; stores; and educational facilities.

5. Nonliquid PCBs. Materials containing PCBs that by visual inspection do not flow at room temperature (25°C or 77°F), or from which no liquid passes when a 100-gram or 100-milliliter representative sample is placed in a mesh number 60 ± 5 percent paint filter and allowed to drain at room temperature for five minutes.

6. Non-PCB Transformer. Any transformer that contains less than 50 ppm PCB, except any transformer that has been converted from a PCB transformer or a PCB-contaminated transformer, cannot be classified as a non-PCB transformer until reclassification has occurred per the requirements of section 30 in reference (b).

7. PCB. Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees, or any combination of substances that contains such substance.

8. PCB Article. Any manufactured article, other than a PCB Container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. This includes capacitors, transformers, electric motors, pumps, pipes, and other manufactured items.

9. PCB Article Container. Any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles or PCB equipment, and whose surface(s) has not been in direct contact with PCBs.

10. PCB Bulk Product Waste. Any waste derived from manufactured products containing PCBs in a nonliquid state, regardless of current concentration, where the concentration at the time of designation for disposal was 50 ppm or greater PCB.

11. PCB Container. Any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB articles and whose surface(s) has been in direct contact with PCBs.

12. PCB-Contaminated Electrical Equipment. Any electrical equipment (e.g., transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches, electromagnets, and cable) that contain 50 ppm or greater PCB, but less than 500 ppm PCB.

13. PCB Equipment. Any manufactured item, other than a PCB container or a PCB article container, that contains a PCB article or other PCB equipment. This includes microwave ovens, electronic equipment, and fluorescent light ballasts and fixtures.

14. PCB Item. Any PCB article, PCB article container, PCB container, PCB equipment, or anything that deliberately or unintentionally contains any PCB or PCBs.

15. PCB Leak. Any instance in which a PCB article, PCB container, or PCB

equipment has any PCBs on any portion of its external surface.

16. PCB Remediated Waste. Waste containing PCBs as a result of a spill, release, or other unauthorized disposal.

17. PCB Transformer. Any transformer that contains 500 ppm or greater of PCB.

18. PCB Waste Generator. Any person whose act or process produces PCBs that are regulated for disposal, whose act first causes PCBs or PCB items to become subject to disposal requirements, or who has physical control over the PCBs when a decision is made that the use of the PCBs has been terminated.

19. Quantifiable Level/Level of Detection. For PCB analysis, it is 2 µg/gram (2 ppm) from any resolvable gas chromatographic peak.

20. Retrofill. To remove PCB or PCB-contaminated dielectric fluid and to replace it with PCB, PCB-contaminated, or non-PCB dielectric fluid.

21. Totally enclosed manner. Any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.

CHAPTER 19

POLYCHLORINATED BIPHENYLS (PCB) MANAGEMENT

SECTION 2: MARINE CORPS POLICY

19200. GENERAL. Marine Corps installations must comply with all applicable Federal, state, and local regulatory requirements relating to PCB management.

19201. MARINE CORPS PCB ANNUAL INVENTORY REPORT. All Marine Corps installations that have PCB items still in use, or that generate, store, treat, or dispose of PCBs must prepare an annual report of all PCBs and PCB items on the installation and those sent off-site for disposal during the past calendar year. For tracking purposes, all PCBs or PCB-containing equipment of 50 ppm or less (such as fluorescent light ballast and small electrical devices) are to be reported on the annual inventory report. This report will be submitted to CMC (LF) by 1 February by making appropriate entries into the PCB Inventory Form on the Headquarters Environmental Applications Portal (HEAP). The annual report should list the PCBs and PCB items in the following manner:

1. Categories. The PCBs and PCB items should be listed in the following categories: those containing less than 50 ppm PCBs, those containing between 50 and 499 ppm PCBs, and those containing greater than or equal to 500 or more ppm PCBs.
2. Identification Number and Location. The identification number and location of each PCB item or storage area for PCBs should be listed.
3. PCB Concentration. The concentration of PCBs in each PCB item that has been determined by testing. Test results should be maintained by the installation.
4. Disposal Plan. The plan for disposal of all PCBs and PCB items should be provided, including the expected date of disposal of all PCBs and PCB items.
5. Annual Update. A statement certifying the PCBs and PCB items that have been disposed since the last annual report should be included. Annual records and document logs required under TSCA reporting and recordkeeping may be attached for supporting documentation.
6. Statement When an Installation is PCB-Free. When the installation becomes PCB-free, a statement to that effect will be submitted.

19202. MARINE CORPS AND DLA ENERGY INTERFACE ON PCBs. Reference (f), designates DLA Energy's DRMS as the responsible agency for worldwide disposal of all PCBs and PCB items. Marine Corps installations shall use the DRMS PCB contract disposal services as much as economically and operationally feasible. The DLA Energy must accept accountability for storage and disposal of PCBs and PCB items. The DLA Energy must also accept custody where the DRMO has conforming storage. Installations may use other appropriate contract authority to procure PCB disposal services; however, they should ensure that the contract requirements comply with all Federal, state, and

local PCB regulations.

19203. PCB TRANSFORMERS IN OR NEAR COMMERCIAL BUILDINGS. PCB transformers in use in or near commercial buildings must be registered with building host owners. Host installations will inform tenants as to the location and type of any PCB transformers in or near all buildings they occupy. The Marine Corps policy is to treat Marine Corps, military, or civilian personnel assembly buildings, educational properties, institutional properties (including museums, hospitals, or clinics), residential properties (living quarters), stores, office buildings (including administrative buildings), and transportation centers (including airport terminal buildings, bus stations, or train stations) as commercial buildings.

19204. PCB EQUIPMENT REMOVAL POLICY. The Marine Corps policy is to eliminate PCBs from all Marine Corps-owned electrical distribution systems and equipment containing hydraulic fluids, cooling oils, and lubricating oils.

#### 1. Transformers

a. Determine, by gas chromatography or another appropriate EPA-approved method, the PCB concentration for all pad-mounted and pole-mounted transformers. Mark transformers in accordance with Federal, state, and/or local requirements. Note PCB test results (in ppm) for each transformer in the installation records.

b. The Marine Corps' goal is to eliminate all PCB transformers containing 50 or more ppm from the inventory. To reduce future potential liabilities, accomplish transformer elimination by replacement or by removal with load transfer to other non-PCB transformers. Retrofill is an acceptable alternative to replacement of transformers when the economic benefit is clear and when a transformer is difficult or impossible to replace because of the constraints of their physical location.

#### 2. Capacitors

a. Establish an accurate inventory of PCB capacitors based on manufacturing information. Mark large capacitors with over 50 ppm PCB as PCB contaminated and label each with the sample identification number and concentration. Mark large capacitors established as not containing PCBs as non-PCB. Note the PCB classification of each large capacitor in installation records.

b. The Marine Corps' goal is to eliminate all PCB capacitors from the inventory.

3. Elimination Plan. Complete annual updates of the installation PCB elimination plan until all PCBs and PCB items have been removed from the installation. Make appropriate entries into the PCB Inventory Form on the HEAP. The plan must include the proposed date of removal and the requested source of funding for each PCB item. Transformer and capacitor owners must prioritize corrective projects based on:

a. The severity of mission impact if a fire, explosion, or major PCB spill occurred.

b. The likelihood of such an incident occurring. Transformer and capacitor owners must coordinate priorities with impacted customers, paying special attention to the redesign of the power grid that accommodates PCB removal. PCB elimination plans must be updated every 1 February for the previous calendar year.

4. Procurement. All future procurement of transformers or any other equipment containing dielectric or hydraulic fluid must be accompanied by a manufacturer's certification that the equipment contains no detectable PCBs or that the equipment contains less than 2 ppm PCBs at time of shipment. For inventory purposes, affix labels to such newly procured transformers and equipment stating that they are "Non-PCB" (i.e., no detectable levels of PCB present).

CHAPTER 19

POLYCHLORINATED BIPHENYLS (PCB) MANAGEMENT

SECTION 3: RESPONSIBILITIES

19300. CMC (LF)/COMMANDER MCICOM

1. Provide information and advice to installation commanders regarding proposed and final rules and regulations pertaining to PCBs, and uniformly apply Marine Corps policy as set forth in this Manual.
2. Monitor the status of installation inventories and PCB management programs.
3. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
4. Conduct special environmental compliance and protection studies with regard to PCBs to assist in establishing policy or initiating actions.
5. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to PCB regulations.
6. Track installation progress toward meeting the elimination of PCB transformers (50ppm and above) and capacitors.

19301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES.

1. Identify and submit, to the CMC (LF), project documentation and funding requests for PCB management facilities that are required to maintain compliance with applicable existing and emerging regulations and permits.
2. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with PCB management requirements.
3. Pay appropriate Federal, state, and local fees.
4. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements (see chapter 15 of this Manual).
5. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all PCB management projects.
6. Designate an activity focal point to coordinate installation PCB management programs.
7. Determine, evaluate, and comply with applicable Federal, state, and local laws and regulations governing PCB management.

8. Submit and sign, as appropriate, PCB reports and other required data to EPA and state and local agencies.
9. Budget and fund the operation and maintenance of facilities and equipment necessary to handle, store, transport, treat, and dispose of Marine Corps PCBs and PCB items in compliance with applicable Federal, state, and local requirements.
10. Transfer to DRMO, To the extent possible, accountability and physical custody of PCBs and PCB items stored for disposal.
11. Complete the annual PCB inventory and forward to CMC (LF).
12. Report PCB spills or incidents involving combustion as prescribed in chapter 7 of this Manual when the spill exceeds the reportable quantities established in applicable state or Federal regulations. Immediately report fire-related incidents involving PCB transformers to the NRC regardless of quantity.
13. Register all PCB transformers and equipment with cognizant fire departments.
14. Register all PCB transformers with EPA by submitting Form 7720-12.
15. Prepare and update the installation PCB elimination plan and submit to CMC (LF).
16. Ensure that coordination occurs, as appropriate, with the safety office in matters relating to PCB management.

REFERENCES

- (a) 15 U.S.C. 2601 et seq.
- (b) 40 CFR 761
- (c) 49 CFR 171
- (d) 49 CFR 180
- (e) SECNAV M-5210.1
- (f) DOD Directive 4140.1, "Supply Chain Materiel Management Policy," April 22, 2004

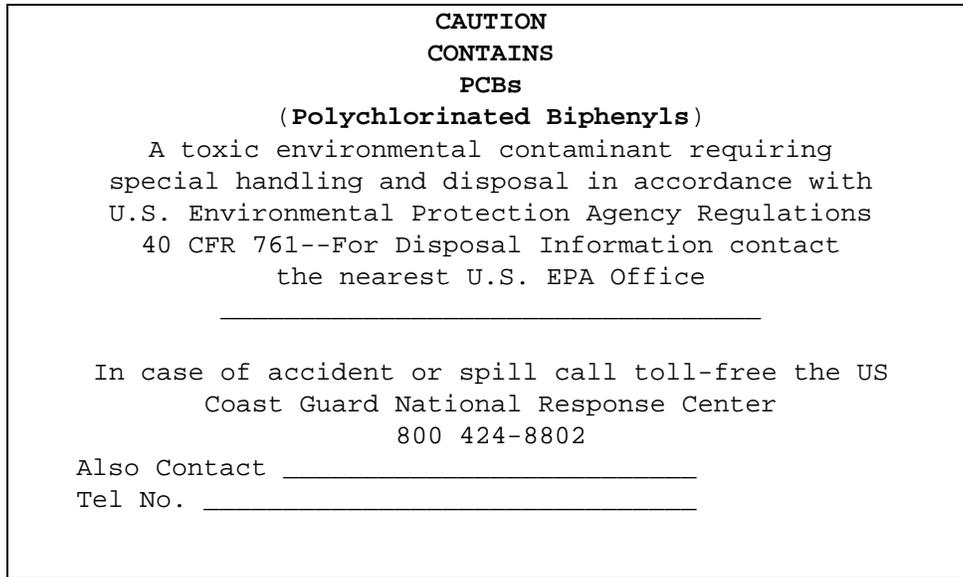


Figure 19-1.--LARGE PCB MARK - M<sub>L</sub> (reference (b), section 45(a))

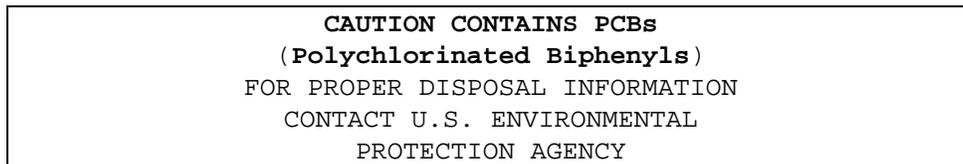


Figure 19-2.--SMALL PCB MARK - M<sub>S</sub>. (reference (b), section 45(b))

CHAPTER 20

WATER QUALITY MANAGEMENT

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CHAPTER 20

WATER QUALITY MANAGEMENT

SECTION 1: INTRODUCTION

20100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for compliance with Federal water pollution control requirements for WQM programs. Chapter 16 of this Manual discusses specific provisions for preventing and controlling surface and groundwater pollution and for the protection of drinking water supplies. For information on the planning, prevention, and control of water pollution from oil discharges and HS releases, see chapter 7 of this Manual.

20101. APPLICABILITY. See paragraph 1101 regarding applicability of Federal, state, and local laws, regulations, and ordinances to Marine Corps active and reserve installations and activities.

20102. BACKGROUND. Marine Corps operations that are regulated through the WQM program include the following:

1. Sanitary or industrial wastewater discharged directly to receiving waters or through an on-base Marine Corps Owned Treatment Works (MCOTW).
2. Sanitary or industrial wastewater discharged to an off-base POTW or to a treatment plant of another DOD activity.
3. Stormwater runoff associated with industrial or construction activities discharged to receiving waters.
4. Range operations which result in nonpoint source pollution.
5. Agricultural, silvicultural, and grazing operations, including outleases, which contribute to polluted runoff or groundwater contamination.
6. Sewage sludge generation, processing, use, and disposal practices.
7. Facilities involved in the transfer, storage, and transportation of POL which, because of their location, could reasonably be expected to cause substantial harm to the environment by discharging into navigable waters or on the adjacent shoreline.
8. HM storage areas and other regulated storage areas where runoff is likely to occur.

20103. FEDERAL STATUTES

1. WQA of 1965 (Public Law 89-234), Water Quality Improvement Act of 1970 (Public Law 91-224), Federal Water Pollution Control Act (FWPCA) of 1972, as amended by Clean Water Act (CWA) of 1977 (33 U.S.C. 1251 et seq.), WQA of 1987 (Public Law 100-4)

- a. The WQA provides Federal assistance for the establishment and

enforcement of jurisdictional water quality standards for surface waters. It was amended in 1970 by the Water Quality Improvement Act to prohibit releases of oil and sewage into navigable waters. The FWPCA made the EPA responsible for setting nationwide effluent standards on an industry-by-industry basis. This Act provided effluent and water quality standards, and instituted a permit system for the regulation of oxygen-demanding pollutant discharges. In 1977, the CWA Amendments refocused the enforcement tools of the FWPCA on the control of toxics. The CWA amended the permit system, which is now the NPDES, a nationwide permit program administered by the EPA. The CWA was amended in 1987 to include the regulation of stormwater runoff and to strengthen enforcement mechanisms. The intent of the CWA is to restore and protect the integrity of the Nation's waters by controlling discharges of pollutants, including oil and HS spills, into those waters.

b. The CWA identifies the following two national goals:

(1) To eliminate the introduction of pollutants into waters of the United States.

(2) To develop water quality which protects and propagates fish, shellfish, and wildlife and provides for recreation in and on the water.

c. To attain these goals, the EPA has identified conventional, nonconventional, and toxic pollutants and the degrees of technology that must be applied to remove these pollutants from point and nonpoint sources of wastewater. Point source discharge requirements are implemented through the NPDES, or through state programs that have been authorized by the EPA. Nonpoint source discharges are regulated through state WQM programs. The CWA also authorizes the EPA to promulgate pretreatment standards for industrial sources discharging effluents to POTWs.

d. Important statutory requirements of the CWA are summarized as follows:

(1) Section 208 requires the preparation of area-wide waste treatment management plans. These plans must contain alternatives for waste treatment management and must apply to all wastes generated within the area involved.

(2) Section 301 provides that the discharge of any pollutant by any person (including Federal installations) into waters of the United States is unlawful without a discharge permit and adherence to any permit requirements.

(3) Section 302 establishes requirements for the development of water quality-related effluent limitations. These limits are calculated for a particular section of a receiving water and applied to one or more point sources by inclusion in an NPDES permit. These limits are more stringent than general water quality standards or categorical industry effluent limits.

(4) Section 303 requires states to develop and revise water quality standards and implementation plans for interstate and intrastate waters. These standards are used to determine effluent discharge limits in NPDES permits.

(5) Section 304(1) requires states to develop a list of impaired waters due to point source discharges of toxic pollutants and a determination of which

point sources are responsible for the discharges. This section requires the imposition of an Individual Control Strategy for the toxic pollutant(s) within the NPDES permit in order to reduce the concentration of the toxic pollutant(s), which would enable the receiving water to meet its designated water quality standard.

(6) Section 306 requires the development of National Standards of Performance for new and existing sources of industrial wastewater from specified industrial categories. Categories relevant to Marine Corps operations include electroplating, metal finishing, metal products and machinery, landfill leachate and incinerators, waste treatment, transportation equipment cleaning, and industrial laundries.

(7) Section 307 establishes a list of toxic pollutants and requires the development of effluent and pretreatment standards for those pollutants.

(8) Section 308 establishes the EPA's right to enter and inspect any facility subject to the CWA provisions. It also specifies requirements for permittees to monitor discharges and to establish and maintain appropriate records and reports.

(9) Section 309 provides for Federal enforcement of the CWA, to include filing of Notices of Violation, issuing compliance orders, and bringing civil suits in United States District Courts against violators. This section also specifies criminal penalties of up to \$25,000 per day and/or 1 year imprisonment for negligent violations; up to \$50,000 per day and/or 3 years imprisonment for knowing violations; and up to \$250,000 per day and/or 15 years imprisonment for an individual or up to \$1,000,000 for an organization that knowingly endangers human life or causes serious bodily injury. Until a complete sovereign immunity waiver similar to that contained in the Federal Facilities Compliance Act (FFCA) is placed into the CWA by Congress, Marine Corps policy specifies that penalties levied under the CWA will not be paid.

(10) Section 311 addresses oil and HS liability. It requires the development of a National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP provides the organizational structure and procedures for preparing for, and responding to, oil discharges and releases of HSs, contaminants, and pollutants. This section further provides that the President (and installation commanders as duly appointed representatives) act on behalf of the United States to recover all costs for restoring or replacing natural resources damaged by such discharges and releases.

(11) Section 313(a) states that Federal agencies, their facilities, and personnel are subject to, and must comply with, all Federal, state, and local requirements, administrative authority, process, and sanctions respecting the control and abatement of water pollution. It exempts Federal personnel from personal liability for civil penalties arising from performing official duties and limits the liability of the United States to only "civil penalties arising under Federal law or imposed by a state or local court to enforce an order or the process of such court." The President may exempt any effluent source of any Federal installation from CWA compliance if he determines it is in the express interest of the United States to do so; however, no exemption may be granted from requirements promulgated for categorical industries under section

306 and toxic pollutants under section 307.

(12) Section 319 requires states to establish nonpoint source pollution management programs. These management programs must identify the BMP for reducing specific types of nonpoint source pollution, identifying programs to implement the BMPs, developing a schedule with annual milestones for implementing the BMPs, certifying that the state has adequate legal authority for administering and enforcing the program, and identifying sources of assistance and funding.

(13) Section 401 requires that any applicant for a Federal license or permit to conduct an activity that may result in a discharge to navigable waters must provide to the permitting agency a certification from the state in which the discharge will originate that any such discharges will comply with applicable CWA provisions. The applicant must provide an opportunity for the certifying state or agency to review the manner in which the facility will operate to ensure that effluent limits will not be violated.

(14) Section 402 establishes the NPDES permit program to control water quality from point source dischargers. Point sources must obtain a discharge permit from the proper authority, usually from the EPA- or state agency. NPDES permits set limits on the amount of various pollutants that a source can discharge to waters of the United States in a given time.

(15) Section 403 establishes ocean discharge criteria and requires that discharges to the territorial seas, contiguous zones, and oceans comply with regulatory requirements above and beyond those specifically required of a typical NPDES permit.

(16) Section 404 establishes requirements for the issuance of permits by the USACE for discharges of dredged or fill material into waters of the United States, including wetlands. Activities in waters of the United States regulated under this program include fill for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and mining projects.

(17) Section 504 provides authority to the EPA to bring suit in United States District Courts to immediately restrain any person (including Federal facilities) from causing or contributing to a discharge alleged to imminently and substantially endanger human health or welfare.

(18) Section 505 provides for citizen suits against any person (including the United States) who allegedly is violating an effluent standard or an order issued by the EPA or a state with respect to such a standard or limitation.

2. OPA of 1990 (Public Law 101-380, 33 U.S.C. 2701 et seq.)

a. This Act prohibits harmful discharges of oil and HSS into waters of the United States or discharges which may affect natural resources owned or managed by the United States.

b. The OPA requires owners or operators of tank vessels and facilities to

develop and submit appropriate FRPs (see chapter 7 of this Manual) because their locations might cause substantial harm by discharging oil or HSs into the environment.

3. SDWA of 1974 (42 U.S.C. 300(f) et seq.)

a. This Act and its amendments prescribe treatment and distribution control strategies for abating the contamination of drinking water. For more information on drinking water systems and conservation, refer to chapter 16 of this Manual.

b. Part C of the SDWA prescribes the protection of underground sources of drinking water. It establishes three groundwater protection programs for which the states should assume the primary responsibility. These programs are:

(1) The Underground Injection Control (UIC) Program. The purpose of this program is to regulate the injection of fluids into underground strata which could affect groundwater supplies.

(2) The Sole Source Aquifer Program. The purpose of this program is to designate and protect aquifers which are the sole or principal source of drinking water for an area and which, if contaminated, would create a significant hazard to public health.

(3) The WHP Program. The purpose of this program is for states to protect wellhead areas from contaminants which may have an adverse effect on the health of persons using wells for drinking water within that area.

4. Rivers and Harbors Act of 1899 (33 U.S.C. 407 et seq.). Sections 9 and 10 of this Act provide authority to the USACE to issue or deny permits for construction of dams, dikes, or other structures in, or ones that will affect, navigable waters of the United States.

5. MPRSA of 1972, as Amended (33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.)

a. This Act, also known as the Ocean Dumping Act, restricts the dumping of all types of materials which would adversely affect human health and welfare or the marine environment, originating from within and outside the United States, into ocean waters. It further prohibits ocean disposal of biological, chemical, and radiological warfare agents, high-level radioactive waste, and medical waste.

b. The Act establishes a system for the issuance of permits by the EPA, under section 102, and by the USACE, under section 103, for ocean disposal of dredged materials. Section 104 contains conditions for permits issued by the EPA and the USACE. Section 104B of the MPRSA banned ocean disposal of sewage sludge or industrial waste after 31 December 1991.

6. CZMA of 1972 (16 U.S.C. 1451 et seq.)

a. The CZMA plays a significant role in WQM, particularly with regard to nonpoint source pollution. State coastal zone management (CZM) programs

approved under the CZMA incorporate flood control, sediment control, grading control, and stormwater runoff control statutes. Under the CZMA, a Federal action that affects any land, water use, or natural resource of the coastal zone must be accomplished as consistently as possible with the enforceable policies of the approved state management programs (15 CFR 930.32). This requirement applies to activities conducted both within or outside the coastal zone if there are impacts in the coastal zone.

b. These state programs must be considered when addressing water pollution impacts of Marine Corps projects. Assistance in determining compliance requirements in specific situations may be requested from the CMC (LF).

c. In their coastal zone management program, states must list activities which directly affect the coastal zone and, therefore, require a consistency determination. Installations should review this list to identify activities applicable to their installation which are likely to require a consistency determination.

7. Federal Facilities Compliance Act (FFCA). The FFCA was passed in 1992 to enable the EPA and states to bring civil action against Federal agencies for violations of certain actions relating to the RCRA. Federal agencies having jurisdiction over a solid waste facility or disposal site, or engaged in the management of solid or HW are subject to all applicable Federal, state, and local laws, regulations, and ordinances addressing solid and hazardous waste. Thus, they are obligated to pay fines and penalties assessed by states.

8. SWDA of 1965, as amended by the RCRA of 1976 (42 U.S.C. 6901 et seq.)

a. This Act prescribes technical requirements for preventing leachate migration from solid or HW disposal sites to groundwater.

b. Section 3023, as implemented under the FFCA, defines and regulates FOTWs, which include Marine Corps domestic wastewater treatment plants. This section prohibits introducing any HW into an FOTW, specifies conditions under which an FOTW without a RCRA permit may receive industrial wastewaters, and discusses enforcement procedures.

c. Section 7003 provides authority to the EPA to bring suit in United States District Court to immediately restrain any person (including Federal facilities) from causing or contributing to a discharge alleged to imminently and substantially endanger human health or the environment.

#### 20104. REQUIREMENTS

##### 1. General

a. Statutory Requirements. Reference (a), requires compliance by Federal installations with all requirements, substantive and procedural, that are applicable to point and nonpoint sources of water pollution. These requirements include Federal, state, interstate, and local laws and regulations with respect to the control and abatement of water pollution. Reference (a) makes it illegal for any Marine Corps installation to discharge any pollutant, other than when such discharge is in compliance with effluent standards,

treatment technology requirements, or other procedural requirements. Marine Corps facilities must comply in the same manner, and to the same extent, as any nongovernmental entity.

b. Regulatory Requirements

(1) Applicable requirements include Federal, state, and local regulations governing water quality. The remainder of this section summarizes many of the significant Federal regulations pertaining to WQM.

(2) Authorized EPA, state, or other regulatory officials who have presented proper credentials must be allowed to enter Marine Corps facilities at reasonable times to examine or copy records, inspect facilities and monitor equipment, and sample any wastewater or stormwater which the activity is required to monitor. Designated representatives of the CG/CO should accompany the officials during these site visits.

(3) Overseas installations will comply with permits obtained on their behalf in accordance with the FGS.

c. EO Requirements. Reference (b) requires executive agencies, including the military departments, to comply with applicable requirements of Federal laws, including reference (a). Reference (b) requires each agency to submit to the Office of Management and Budget an annual plan for environmental pollution control with cost estimates for the design, construction, management, operation, and maintenance of Federal facilities.

d. DOD Requirements. DOD has established the DON as the DOD Executive Agent for implementation of reference (a).

2. Point Source Control

a. Definition (Reference (c)). A point source is any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

b. Discharge Permits

(1) References (c) and (d) require NPDES permits for all point source discharges into waters of the United States. Discharges must comply with all terms and conditions of EPA, state, and locally issued permits.

(2) For Marine Corps installations with discharge points located in states that have not been authorized to administer all or parts of reference (a) programs, NPDES permits must be requested from, and issued by, the EPA. If a state has a separate water pollution permit program, Marine Corps installations must, when required, obtain a state permit as well as an EPA permit for point sources regulated under that program.

(3) For all discharge points located in states that have EPA-approved NPDES programs, permit applications must be filed with, and issued by, the appropriate state agency.

(4) In accordance with reference (a), a NPDES permit term may not exceed 5 years. Any discharge that will continue after its discharge permit expires must be re-permitted prior to the expiration date of the current permit. A new permit application must be submitted to the permitting agency no later than 180 days prior to discharge (if a new discharger) or the permit expiration date (if already an NPDES permit holder). For projects involving construction activities, a NPDES permit application for stormwater discharges must be submitted at least 90 days prior to the start of construction. In the case of complex permits, such applications should be filed well in advance of the 180-day (or 90-day) requirement. To meet these deadlines, installations must allow sufficient time to collect the required information and prepare the application.

(5) All permit applications and required reports must be prepared in the format prescribed by the permitting agency.

(6) Any monitoring records, including all original strip chart recordings for continuous monitoring, instrumentation and calibration, maintenance records, and laboratory test results pursuant to sampling, must be retained per reference (e), SSIC 5090.4, from the time of sampling at the installation where monitoring is performed, if not otherwise prescribed.

(7) The owner of a treatment plant which continually fails to meet its discharge permit limits can be subject to EAs by the permitting agency and to citizen suits filed in a United States court.

c. Industrial Wastewater Treatment and Direct Discharge Requirements

(1) Marine Corps Owned Industrial Wastewater Treatment Plants (IWTPs) and other industrial-based activities with direct discharge into receiving waters must obtain and comply with an NPDES permit.

(2) Direct discharges from oil/water separators must be permitted, monitored, and reported under the NPDES program. The installation of wash water recycling equipment (a P2 technology) is the preferred method of treating and reusing air and ground equipment wash rack effluent. Where the installation of recycling equipment is not practical, wash rack discharges when aircraft or vehicles are being washed should be valved to oil/water separators which discharge to the sanitary sewer and valved to drainage ditches at all other times so that stormwater runoff does not overload the sanitary sewer system. Oil transfer and storage facility stormwater should be directed through an oil/water separator prior to discharge. Marine Corps installations should contact their state and local regulatory agencies for information on regulations and standards applicable to oil/water separators.

(3) When new NPDES permit standards are promulgated, Marine Corps-Owned IWTPs and other industrial activity dischargers may not be able to comply automatically with the new standards. If the discharger determines it cannot meet the new standard, it must begin to upgrade its treatment processes to meet

the deadline for compliance with the new standards. If the discharger cannot meet the required compliance date, it should negotiate a new date in a Consent Order with the appropriate regulatory agency.

d. Discharge to FOTWs

(1) Industrial discharges to an FOTW will meet all applicable general and categorical pretreatment standards contained per references (f) and (g), as appropriate. After the effective date of any new pretreatment standards for toxic substances, affected sources will comply within the timeframe designated by the appropriate agency.

(2) If necessary, an FOTW can impose limitations more stringent than the categorical pretreatment standards on industrial activities which discharge to it, in order to prevent interference with treatment plant operations, to prevent pass-through of pollutants to receiving waters, to prevent sewage sludge contamination, to prevent workers from being exposed to health hazards, and to prevent a violation of the FOTW's NPDES permit. The repeated inability of an FOTW to meet its discharge permit limits, due to an industrial activity's failure to pretreat its waste, can result in EAs against both the FOTW and the industrial activity.

(3) Industrial activities discharging to an FOTW will notify the FOTW operator of any substantial change in quantity or type of pollutants discharged and of any spills, releases, or slug discharges of any substance which could adversely impact the FOTW, its personnel, or the effluent discharged from the treatment works.

(4) FOTWs discharging to waters of the United States must be designed, constructed, operated, and maintained to comply with all effluent limitations as prescribed by discharge/NPDES permits.

e. Discharge to POTWs

(1) Discharges to a POTW must meet all applicable general and categorical pretreatment standards contained in per references (f) and (g), as appropriate. After the effective date of any new pretreatment standards for toxic substances, affected sources must comply within the timeframe designated by the permitting authority. EPA published new regulations, which became effective November 2005, that streamline and clarify various provisions of the General Pretreatment Regulations for existing and new sources of pollution codified in reference (f). In general, the new rule reduces the regulatory burden on both industrial users and state/POTW control authorities without adversely affecting environmental protection.

(2) A POTW controls discharges received from Marine Corps installations or activities through local ordinances, sewer use contracts, and/or discharge permits. These control mechanisms often require the user to monitor its industrial discharges into the sewer, to pretreat certain categories of wastes, to notify the treatment plant of substantial changes to the quantity or quality of the influent, and to take other administrative or procedural actions as necessary.

(3) Dischargers to a POTW usually pay user fees commensurate with the waste load contributed. New sources to such systems may also be required to share in the capital costs for increasing the capacity of the POTW's collection, treatment, and disposal facilities.

(4) Under reference (a), states have established certain areas for which a regional approach to wastewater treatment is necessary. Such areas have developed management plans, per section 208 of reference (a), that detail collection and treatment works requirements, timetables for accomplishment of the plan, and requirements for individual participants (reference (h) addresses such WQM plans). Since approved plans are binding on Marine Corps installations within the region, it is imperative that close liaison be established with these planning organizations.

f. Hazardous Pollutant Discharges

(1) In reference (i), the EPA identifies a list of HSS regulated under the reference (a). Reference (j) presents the reportable quantities for releases of these HSSs. Chapter 9 of this Manual discusses prevention of HS discharges that may result from accidental spills on land or into waters of the United States.

(2) HW may be introduced into a treatment facility only if the facility is specifically permitted to treat the type of waste introduced under a TSD permit per reference (k), or a "permit by rule." Under section 60 of reference (l) (Permits by Rule), a POTW that accepts HW for treatment is deemed to have a permit per reference (k) provided that the following conditions are met: the POTW has an NPDES permit; the POTW complies with the conditions of its NPDES permit; and, as listed in section 60(c)(3) of reference (m), the POTW complies with regulations related to the manifest system. As stated in section 3023(b) of reference (n), it is unlawful to introduce any HW into an FOTW.

(3) POTWs have a "domestic sewage exclusion" (reference (o), section (a)(1)) that allows domestic sewage and any mixture of domestic sewage and other wastes, including HWs, that pass through a sewer system to a POTW to be excluded from the definition of a solid waste and, thus, are exempt from regulation per reference (k). However, the exclusion rule does not provide for the uncontrolled discharge of HWs to a POTW. Note that states are free to impose stricter requirements. Therefore, installations must confirm with their state HW authority on HW discharge regulations.

(4) To ensure similar treatment for both POTWs and FOTWs, section 108 of reference (p) added a new section 3023, "Federally Owned Treatment Works," to reference (n) that includes a similar but conditional "domestic sewage exclusion" for FOTWs (reference (n), section 3023(a)(1-4)). For solid or dissolved materials entering an FOTW to be exempt from regulations per reference (k) as it pertains to the "domestic sewage exclusion," they must meet at least one of the following criteria:

(a) Materials must be subject to a pretreatment standard under section 307 of reference (a) (provided the source is in compliance with established pretreatment standards).

(b) Materials not currently covered by a pretreatment standard must be subject to (and in compliance with) an EPA-promulgated pretreatment standard that would be applicable before 6 October 1999 (provided EPA has promulgated a schedule for establishing such a standard).

(c) Materials not covered under either of the above criteria must be treated in accordance with the applicable LDR treatment standards per reference (k).

(d) The generator source is a household or a CESQG generating less than 100 kilograms of HW, or less than one kilogram of acutely HW per month.

g. Perchlorate Monitoring

(1) In accordance with current DOD and Marine Corps perchlorate release management policies (references (q) and (r), respectively), Marine Corps installations that use perchlorate during the manufacture, maintenance, processing, recycling, or demilitarization of military munitions and have a NPDES permit associated with the activity must sample for perchlorate for at least two semi-annual sampling events. Note that affected installations should have already performed this sampling, as required under former DOD and Marine Corps perchlorate management policies (references (s) and (t), respectively). Sampling must be conducted in conjunction with permit effluent sampling for that NPDES permitted point source and in accordance with the DOD Perchlorate Handbook (<https://www.denix.osd.mil/portal/page/portal/EDQW/Perchlorate>). Installations with confirmed results, indicating perchlorate levels above 15 p in effluent discharges must notify CMC (LF) for further action. Depending on applicable water quality standards and other factors (e.g., mixing zones), permit modifications and follow-on actions may be required. Irrespective of current state permit requirements, risk management actions may be warranted to reduce perchlorate discharges to receiving water bodies. If analytical results do not indicate the presence of perchlorate, no further sampling or action is required, except as required by state or local regulations.

(2) DOD and Marine Corps perchlorate sampling requirements shall not diminish any existing wastewater discharge permit requirements established by EPA or state regulatory authorities.

(3) Installations must enter all perchlorate sampling data into DOD's perchlorate database annually.

(4) Marine Corps permanent facilities overseas are not subject to DOD or Marine Corps perchlorate sampling and reporting requirements.

h. Stormwater Discharges

(1) The 1987 amendments to reference (a) established greater regulation of stormwater discharges; the implementing regulations in section 26 of reference (c) became effective in December 1990. The NPDES stormwater program regulates stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. Federally operated storm sewer systems are defined as MS4s. Most stormwater discharges are considered point sources, and operators of these sources must check with the permitting authority if an NPDES permit is required

before they can discharge.

(a) MS4s. Polluted stormwater runoff is commonly transported through MS4s, from which it is often discharged untreated into local waterbodies. Phase I regulations under the stormwater program, issued in 1990, require medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. Phase II regulations, issued in 1999, require regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. Generally, Phase I MS4s are covered by individual permits and Phase II MS4s are covered by a general permit.

(b) Construction Activities. As of 10 March 2003, construction activities disturbing one or more acres need an NPDES permit. At a minimum, these permits require development of a site-specific stormwater pollution prevention plan (SWPPP), covering both the construction and the post-construction phases of the project. Where EPA is the permitting authority, operators must meet the requirements of EPA's Construction General Permit.

(c) Industrial Activities. Operators of industrial facilities falling into certain categories listed by EPA in its stormwater regulation need an NPDES permit if the stormwater is discharged directly into a surface water or an MS4. The NPDES program includes an industrial stormwater permitting component that covers 29 industrial sectors that require authorization under an NPDES industrial stormwater permit for stormwater discharges. For industrial facilities located in areas where EPA is the permitting authority, coverage is available under the Multi-Sector General Permit, which EPA published on September 29, 2008. The Multi-Sector General Permit regulations specify steps that facility operators must take prior to becoming eligible for permit coverage. The regulations also includes effluent limits, monitoring, inspection, and reporting requirements, and corrective action requirements.

(2) Most states are authorized to implement the NPDES stormwater program and administer their own stormwater permitting programs. The EPA remains the permitting authority in a few states, territories and on most tribal lands. For these areas, EPA provides oversight and issues stormwater permits. The Construction General Permit and Multi-Sector General Permit apply only in areas where EPA is the permitting authority.

(3) Installations should coordinate with regional EPA offices and cognizant state regulatory agencies to access the applicability of NPDES General or Individual Permit procedures.

(a) General Permits. These permits are intended to cover the majority of stormwater discharges associated with industrial activity. Dischargers seeking to be covered by a general permit must file an NOI with the appropriate permitting authority. The NOI requirements for the general permit usually address only general information and typically do not require the collection of monitoring data. Section 28 of reference (c) provides information regarding general permit NOI filing requirements. Where EPA is the permitting authority, construction activities disturbing one or more acres of land must meet the requirements of EPA's Construction General Permit. Also,

the Multi-Sector General Permit provides coverage for industrial facilities located in areas where EPA still remains the NPDES permit authority.

(b) Individual Permits. Operators of facilities with stormwater discharges associated with industrial activity which do not obtain coverage under a general permit, or which are not eligible for a general permit, must submit an individual permit application. Stormwater discharges that cannot be authorized by general permits include those with existing effluent guideline limitations for stormwater; with an existing NPDES individual or general permit for stormwater discharges; or which are, or may reasonably be expected to be, contributing to a violation of a water quality standard. Section 26(c) of reference (c) specifies the EPA's individual stormwater permit application procedures and information requirements for stormwater discharges associated with industrial activity and stormwater discharges associated with small construction activity. Applications must be submitted 180 days before the discharge begins or 90 days before the construction activity is due to begin. State regulations generally parallel those of the EPA in requiring that a permit application be filed with the appropriate permitting authority.

(4) On 19 December 2007, reference (u) was signed into law. This new law includes a provision that requires projects involving a Federal facility with a footprint that exceeds 5,000 square feet to "use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow." Furthermore, due to continuing water quality concerns, states and the EPA are considering mandatory treatment and control of stormwater. In addition, a Department of Navy policy (reference v) directs the Marine Corps to meet a goal of no net increase in stormwater volume and sediment or nutrient loading from major renovation (i.e., exceeding \$5M) and major construction projects (i.e., exceeding \$750K) beginning in FY 2011. The Marine Corps must plan, program, and budget to meet the requirements of this policy. The new policy requires that Low Impact Development (LID) is considered in the design for all projects that have a stormwater element. LID techniques offer a suite of BMPs that maintain or restore predevelopment hydrology and mitigate the adverse effects of construction projects on water quality by cost effectively reducing the volume and pollutant loading of stormwater before it reaches the receiving water bodies. Reference (w) provides current guidance on LID techniques. Additionally, reference (x) provides information on the costs and benefits of using LID strategies and practices to help protect and restore water quality.

(5) Industrial activities and facilities which can contaminate stormwater, and to which these regulations apply, may occur on Marine Corps installations. These activities and facilities include HW treatment, storage, and disposal facilities; scrap and waste material processing and recycling facilities; landfills; sewage sludge land application sites; petroleum bulk oil stations and terminals; airfields; wastewater treatment plants with a design capacity of one million gallons per day or greater; and construction activities.

(6) Installations discharging to an MS4 serving a population of 100,000 or more must submit notification information to the operator of the municipal

storm sewer system.

(7) In general, the EPA and state stormwater discharge permit regulations require the permittee to:

(a) File a permit application or NOI.

(b) Determine if any nonstormwater discharges occur. Certain nonstormwater discharges are authorized, such as water from fire fighting activities, hydrant flushing, street cleaning, air-conditioning and compressor condensates, and lawn watering. For other nonstormwaters, the discharger must develop a list of illicit discharges discovered and submit it to the regulatory agency. The agency determines which discharges may be permitted and under what conditions. Any discharges that cannot be permitted must be eliminated. Coordination with Federal and state regulatory agencies is essential to determine applicable requirements.

(c) Prepare and implement a SWPPP. The SWPPP's objectives should be to identify pollution sources potentially affecting stormwater discharge quality and to describe and implement practices to minimize and control pollutants from the industrial facility. The process for developing an SWPPP includes the following four steps:

1. Formation of a qualified P2 team.
2. Assessment of potential stormwater pollution sources.
3. Selection and implementation of appropriate BMPs and controls.
4. Periodic examination of the plan's effectiveness.

(d) Further information is provided in references (y) and (z). Chapter 15 of this Manual provides additional information regarding general P2.

(e) As required by the NPDES permit, monitor the discharges, report the results to the permitting authority, and maintain required records per reference (e), SSIC 5090.4.

(f) Comply with any effluent limits placed within the permit.

(8) Reference (aa) provides an overview of the permitting process and information regarding the permit application requirements.

i. Waste Disposal Sites

(1) Collected stormwater runoff from waste disposal sites, such as landfills, sewage sludge monofills, and land application sites, is regulated under an NPDES permit as noted in paragraph 20104.3(f).

(2) Leachate from waste disposal sites must be tested for the hazardous characteristics listed in reference (n) to determine which disposal method can be used. Landfill leachates have been found to contain high concentrations of toxic organic compounds, metals, and conventional and nonconventional

pollutants.

(a) Hazardous leachate must be treated or disposed of in accordance with requirements specified for HW (see chapter 9 of this Manual).

(b) Direct discharges of nonhazardous leachate to receiving waters must be permitted under the NPDES. The permitting authority will develop treatment and permit requirements for leachate discharged to receiving waters depending upon the quantity and nature of the leachate and its potential impact on the environment.

(3) In 2000, EPA published its final "Effluent Limitations Guidelines, Pretreatment Standards, and NSPS for the Landfills Point Source Category" (references (ab) and (ac)). Regulations per reference (k) establish disposal criteria and operation and design standards for landfills, but do not address the discharge of landfill wastewater to surface waters or to POTWs. Therefore, EPA set effluent guidelines under reference (a) for this industry to limit the amount of pollutants discharged into waters of the United States. The final effluent guideline regulation only applies to landfills that discharge wastewater directly into receiving waters. It does not apply to landfills that discharge wastewater into POTWs or FOTWs. Based on comments on the proposed rule and further analysis by EPA, it was concluded that national pretreatment standards are not necessary for landfills.

j. Non-NPDES Discharge Permits

(1) Sanitary and industrial wastewaters and stormwater may be disposed of in a non-discharging manner. Examples of such instances are evaporation/transpiration ponds, leach fields, spreading basins, and land application systems.

(2) Such discharges are not regulated under the NPDES program, but are normally regulated under a state permit program, such as California's "Waste Discharge Requirements." These state permits usually contain limitations and conditions similar to those in NPDES permits, such as monitoring, reporting, and recordkeeping requirements, flow restrictions, pollutant limits, etc. Noncompliance with these state permit conditions is subject to enforcement action by the permitting authority.

3. Nonpoint Source Control

a. Regulatory Citation. Reference (h) specifies requirements for nonpoint source management programs. These regulations incorporate requirements per section 208 of reference (a) for development of area-wide waste treatment management plans. They also include requirements per section 319 of reference (a) for states to establish nonpoint source pollution management programs through WQM plans.

b. State WQM Plan. The plan must describe the non-regulatory and regulatory programs, activities, and BMPs selected to control nonpoint source pollution where necessary to protect or achieve approved water body uses. The plan must identify BMPs to be employed to reduce specific types of nonpoint source pollution, identify programs to implement the BMPs, develop a schedule

with annual milestones for implementing the BMPs, certify that the state has adequate legal authority for administering and enforcing the program, and identify sources of assistance and funding.

c. Contributors to Nonpoint Source Pollution

(1) Most nonpoint source pollution results from unchannelled runoff of stormwater, snowmelt, or irrigation. This runoff picks up contaminants from tilled land, urban and suburban areas, construction sites, timber harvest areas, mine drainage, and other disturbed areas.

(2) At Marine Corps installations, nonpoint sources include agricultural, silvicultural, and grazing operations (including outleases), firing and training range operations, construction sites, industrial activities without discrete point source conveyances, parking lot and roof runoff, and runoff from lawn maintenance activities, such as fertilizer and herbicide applications, in residential and other garrison areas.

d. Discharge Permits. The EPA and the states do not require discharge permits for nonpoint sources of pollution.

e. BMPs

(1) Where required by states, installations must implement BMPs to control nonpoint source pollution. If not required, installations should implement BMPs as resources allow.

(2) BMPs, which can be implemented to reduce nonpoint source pollution, include, but are not limited to, the following (see also reference (ad)):

(a) P2, such as performing maintenance and storing materials under cover.

(b) Wet and dry stormwater detention and retention ponds with sedimentation manholes and inverted elbows to trap sediments and floatable items.

(c) Constructed wetlands.

(d) Grassed swales.

(e) Forest buffers from 50 to 100 feet wide along streams.

(f) Fabric screens and hay bales at construction sites to reduce erosion and trap sediments prior to discharge.

f. Waste Disposal Sites

(1) To prevent surface water contamination, section 27(a) of reference (ae) requires that runoff from the active portion of the landfill unit not cause a discharge of pollutants into waters of the United States, including wetlands, which violates any requirements of reference (a), including NPDES requirements.

(2) Similarly, section 27(b) of reference (ae) prohibits any discharge of a nonpoint source of pollution to waters of the United States, including wetlands, which violates any requirement of an area-wide or state-wide WQM plan that has been approved under section 208 or 319 of reference (a), as amended.

(3) If stormwater runoff and uncontrolled leachate discharges to surface waters occur, they must be controlled by an NPDES permit.

g. Reference. EPA publications, references (af) and (ag), provide in-depth information for developing and implementing nonpoint source pollution control projects.

#### 4. Septage Treatment and Disposal

##### a. Regulatory Citations

(1) The EPA regulations define domestic septage as "either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage." Septage that does not meet this definition must be handled and disposed of per reference (ah).

(2) Septage which is land applied must meet the requirements of reference (ai).

b. Septic Tank Management. The EPA regulations for UIC in reference (aj) apply to septic tanks and cesspools which are Class V wells by virtue of their drain fields. They contain requirements for construction, operating, monitoring, and reporting.

##### c. References

(1) The EPA publication , reference (ak), provides concise, practical information on septic tank management and the handling, treatment, and disposal of septage.

(2) The EPA handbook (reference al) presents a review of available design, performance, operation and maintenance, cost, and energy information pertaining to receiving, treatment, and disposal of septage.

#### 5. Groundwater Protection

a. General. Another goal of programs which regulate point and nonpoint sources of water pollution is to prevent groundwater contamination from those sources. Discharges to groundwater must meet applicable requirements of reference (am), state, and local implementing requirements, and applicable permit conditions. Specifically, the WQM plans, UIC Program, and WHP Program ensure that groundwater sources for drinking water are protected from contamination. Chapter 18 of this Manual provides information regarding groundwater protection requirements applicable to the UIC Program (per reference (am)), WHP Program, and USTs.

##### b. State WQM Plans

(1) State WQM plans identify and develop programs to control groundwater pollution resulting from disposal of pollutants on land or in subsurface excavations. States can require installations to monitor groundwater around landfills, leaking UST sites, firing ranges, wastewater oxidation and percolation ponds, septic tank leach fields, fire training pits which use waste fuel, HW storage sites, etc.

(2) States may issue Non-NPDES-discharge permits with pollutant limits intended to protect underlying aquifers from contaminants contained in the discharge using the state WQM plan as the basis for the permit limitations.

c. UIC Program

(1) References (an), (ao), (aj), and (ap) contain the UIC program regulations. Chapter 16 of this Manual summarizes these regulations and highlights important requirements.

(2) Installations must pay special attention to Class V wells, which include certain septic system wells and cesspools, stormwater drainage wells, and dry wells used for waste disposal. To continue to operate these wells under the "authorized by rule" (reference (an)), the installation must submit to the permitting authority an inventory of all wells located on the installation and must construct, operate, and close Class V wells in a manner which protects underground sources of drinking water as stated in UIC program requirements. In 1999, EPA added new requirements for large-capacity cesspools and motor vehicle waste disposal wells. The Class V Rule prohibits new large-capacity cesspools and new motor vehicle waste disposal wells nationwide. The rule also phase out existing cesspools nationwide by April 2005. Operators of existing motor vehicle wells in regulated areas must either close their wells or obtain a permit.

d. WHP Program

(1) Reference (am) mandates this locally administered program to protect community drinking water wells and well fields from contamination sources. Chapter 16 of this Manual summarizes these regulations and highlights important requirements.

(2) An installation which derives its potable water from on-base wells should survey its agricultural, commercial, industrial, residential, and other activities to identify and locate operations with the potential to release pollutants into the underlying groundwater.

e. References

(1) The EPA Technical Assistance Document, reference (aq), addresses the potential impacts of contamination from light industrial activities on WHP areas. Light industry sectors covered by this document and found at Marine Corps installations include metal products and machinery, scrap material recycling, transportation equipment maintenance, automotive and truck repair, and highway de-icing.

(2) The EPA document, reference (ar), provides software and

instructions to implement a comprehensive database system designed to store, analyze, and report data generated during groundwater monitoring programs required by references (k), (at), and (am).

6. Sewage Sludge Use or Disposal

a. Regulatory Citations

(1) The EPA regulations in reference (at) provide standards for the land disposal of sewage sludge determined to be hazardous under reference (o).

(2) The EPA regulations in reference (au) provide the requirements for disposal of sewage sludge in a MSWLF.

(3) The EPA regulations in reference (av) provide the requirements under which sewage sludge may be co-fired in an incinerator with other wastes.

(4) The EPA regulations in reference (ai) provide the standards for the use and disposal of nonhazardous sewage sludge. These standards apply to the following:

(a) Any installation which prepares sewage sludge, applies sewage sludge to land, or fires it in a sewage sludge incinerator, and to the owner/operator of a surface disposal site.

(b) Any sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

(c) The exit gas from a sewage sludge incinerator stack.

(d) The land where sewage sludge is applied, a surface disposal site, and a sewage sludge incinerator.

(5) The EPA regulations in reference (aw) provide the standards for the disposal of nonhazardous sewage sludge on land when the sewage sludge is not disposed through a practice regulated under reference (ai).

b. Permit Requirements

(1) Reference (ai) sets national standards for management and disposal of sewage sludge. The rule is designed to protect human health and the environment when sewage sludge is beneficially applied to the land, placed in a surface disposal site, or incinerated. Generally, POTW/FOTW sewage sludge disposal requirements are incorporated into NPDES permits. If, however, they are not, regulations under reference (ai) are self-implementing in most cases. This means that the rule will generally be fully enforceable, even in the absence of a permit. In addition, all installations shall comply with applicable Federal, state and local sewage sludge disposal requirements. Marine Corps facilities shall take all reasonable measures to beneficially dispose of sludge. Beneficial disposal includes a number of land application methods and composting.

(2) An FOTW must submit an NPDES permit application to comply with the

provisions of reference (ai).

(3) For the operation of a sewage sludge incinerator, an application for a permit under reference (ax) must be submitted to the appropriate permitting authority.

c. Land Application Requirements

(1) Land application includes the spraying or spreading of sewage sludge onto the land surface, the injection of sewage sludge below the land surface, or the incorporation of sewage sludge into the soil so that it can condition the soil or fertilize crops or vegetation.

(2) Marine Corps installations which apply bulk sewage sludge to the land, prepare sewage sludge for application to land off site, sell or give away sewage sludge or a sewage sludge-derived product in a bag or other container, or apply domestic septage to the land must comply with the requirements in subpart B of reference (ai). These requirements include adherence to pollutant ceiling concentrations, cumulative and annual pollutant loading rates, and monthly average pollutant concentrations; management practices; operational standards for pathogens and vector attraction reduction; and monitoring, recordkeeping, and reporting, depending on the quality of the sludge.

d. Surface Disposal

(1) Surface disposal involves the disposal of sewage sludge in an active sewage sludge unit. It does not include the treatment or storage of sewage sludge on land in preparation for ultimate use or disposal.

(2) If the same sewage sludge is stored at a site for more than two years, the permitting authority can determine that the storage site has become an active sewage sludge unit unless the installation can explain extenuating circumstances for delaying disposal.

(3) Marine Corps installations which dispose of sewage sludge at an active sewage sludge unit must comply with the requirements in subpart C of reference (ai). These requirements include proper location of an active sewage sludge unit; submission of closure and post closure plans 180 days prior to closure of the unit; sewage sludge pollutant concentrations; management practices; operational standards for pathogens and vector attraction reduction; and monitoring, recordkeeping, and reporting.

e. Pathogens and Vector Attraction Reduction. The EPA regulations in subpart D of reference (ai), provide the following requirements for pathogen and vector attraction reduction in sewage sludge:

(1) Requirements for a sewage sludge to be classified either Class A or Class B with respect to pathogens.

(2) Site restrictions for land on which a Class B sewage sludge is applied.

(3) Pathogen requirements for domestic septage applied to agricultural

land, forest, or a reclamation site.

(4) Alternative vector attraction reduction requirements for sewage sludge that is applied to the land or placed on a surface disposal site.

f. Incineration

(1) Marine Corps installations which fire sewage sludge in a sewage sludge incinerator must comply with the requirements in subpart E of reference (ai). These requirements include adherence to national emission standards for beryllium and mercury in subparts C and E of reference (ay), respectively; pollutant limits for arsenic, cadmium, chromium, lead, and nickel as calculated by the appropriate equations in subpart 43 of reference (ai); air dispersion modeling and performance testing requirements; operational standards for total hydrocarbons or carbon monoxide; management practices; and monitoring, recordkeeping, and reporting requirements.

(2) Compliance with pathogen and vector attraction reduction requirements is not required for facilities which fire sewage sludge in a sewage sludge incinerator.

7. Dredge and Fill Operations

a. Permits

(1) Section 404 of reference (a) deals with the placement of dredged or fill material into waters of the United States. The 404 permit program is administered jointly by EPA and the USACE. The USACE handles the issuance of permits and determines whether a particular plot of land is a wetland or water of the United States. Installations which intend to construct a dam, dike, dock, pier, or other structure, or to dredge, fill, or otherwise alter or modify navigable waters or wetlands must apply to the USACE district engineer or authorized state agency for an individual permit, unless the discharge is allowed under a nationwide or regional general permit.

(2) Section 404 regulatory citations:

(a) The EPA and USACE regulations in reference (az) and reference (ba), respectively, explain the basis of the dredge and fill permit system.

(b) Reference (bb) explains explain regulations for a USACE permit to construct a dam or dike.

(b) Reference (bc) contains regulations for a USACE permit for structures or work in or affecting waters of the United States.

(c) Reference (bd) sets forth regulations for a USACE permit to discharge dredged or fill material in waters of the United States.

(d) Reference (be) specifies application requirements for individual USACE permits.

(e) Reference (bf) contains regulations regarding general

nationwide permits.

(f) Reference (bg) provides procedures on state permit programs regulated by the EPA for discharge of dredged or fill material.

(3) If the district engineer determines that a water quality certification for the proposed activity is necessary under section 401 of reference (a), the district engineer will inform the installation of this requirement. The installation must obtain a state certificate indicating that the activity complies with applicable state effluent limitations, water quality related effluent limitations and standards, water quality implementation plans, and toxic effluent limitations. If the state includes any monitoring requirements, these must be forwarded to the USACE district engineer for consideration with the permit application.

(4) An installation which is located within a state operating under an approved coastal zone management program must ensure that the proposed activity is consistent with the state coastal zone management program per reference (bh). If the proposed activity is not consistent with the state program under reference (bh), the district engineer cannot make a decision on the permit application until the installation and the state have implemented the procedures specified in under reference (bh) for resolving their disagreements.

(5) The USACE and states with EPA-approved dredging control programs may issue a general permit applicable for 5 years to categories of similar actions that will cause minimal environmental effects either singularly or cumulatively. The general permit may be issued on a state, regional, or national basis. Projects covered by a general permit do not require individual permits, although some additional individual requirements, such as revocation or modification for specific activities due to adverse environmental impact, may be applied by the USACE or states on a case-by-case basis.

b. Permit Exemptions

(1) Section 404(f) of reference (a) provides that certain discharges generally do not need a 404 permit, including several activities that are part of normal, ongoing farming, ranching, and silviculture activities (e.g., plowing, seeding, cultivating, and harvesting).

(2) For Federal construction projects specifically authorized by Congress for which an EIS has been written and submitted to Congress,, section 404(r) of reference (a) states: "The discharge of dredged or fill material as part of the construction of a Federal project specifically authorized by Congress, whether prior to or on or after the date of enactment of this subsection, is not prohibited by or otherwise subject to regulation under this section, or a state program approved under this section, or section 301(a) or 402 of reference (a) (except for effluent standards or prohibitions under section 307), if information on the effects of such discharge, including consideration of the guidelines developed under subsection (b)(1) of this section, is included in an EIS for such project pursuant to reference (bi) and such EIS has been submitted to Congress before the actual discharge of dredged or fill material in connection with the construction of such project and prior to either authorization of such project or an appropriation of funds for each

construction."

c. Discharges of Dredged or Fill Material

(1) Discharges of dredged or fill material into waters under USACE jurisdiction must comply with Federal regulations and the terms of the individual or general permit issued for that activity.

(2) Discharges into waters under the jurisdiction of states with approved dredging control programs must comply with applicable state permits and discharge regulations, including state fee schedules.

(3) Disposal site selection may entail field sampling and analyses. An elutriate and bioassay test may be required to determine if the proposed dredged materials should be classified as polluted or unpolluted. Other surveys, including site monitoring, may be required at disposal sites before, during, and after discharge of the dredged or fill material.

d. In-water Construction. The USACE and some states require a permit for any in-water construction. Facilities proposing in-water construction shall obtain applicable permits prior to award of construction contracts, and comply with all permit conditions.

8. Ocean Disposal

a. Prohibited Disposal. Ocean disposal of other than dredged material, including any materials collected from Marine Corps installations or units, is prohibited by reference (bj) unless authorized by an EPA permit.

b. Permits

(1) No permit may be issued for ocean disposal of biological, chemical, and radiological warfare agents, high level radioactive waste, and medical waste.

(2) Under section 102 of reference (bj), the EPA is the authority for issuing all permits for the transportation from the United States, or for the transportation from OCONUS Marine Corps installations, of any material for the purpose of dumping it in ocean waters at locations where the EPA Administrator determines such dumping will not unreasonably degrade or endanger human health or the marine environment.

(3) Under section 103 of reference (bj), the USACE is the authority for issuing all permits for the transportation of dredged material that will be disposed of in ocean waters. Installations which intend to transport or contract for the transportation of dredged material for ocean disposal must apply to the USACE district engineer for an individual permit. EPA Regional Administrators have the authority to review, to approve or to disapprove, or to propose conditions upon Dredged Material Permits for ocean dumping. The EPA regulations for reviewing USACE permits for dredged materials are specified in reference (bk).

(4) Regulatory Citations:

(a) The EPA and USACE regulations in references (bl) and (bm), respectively, explain the basis of the ocean disposal permit systems.

(b) Reference (be) specifies application requirements for individual USACE ocean disposal permits.

(c) Reference (bn) contains EPA permit application requirements.

(d) Reference (bo) sets forth EPA regulations pertaining to approval of ocean dumping permit applications.

(e) Reference (bp) provides EPA regulations pertaining to evaluation of permit applications for the ocean dumping of material.

(5) Permit applications must be accompanied by an environmental assessment which includes an examination of the environmental impact criteria set forth in subpart B of reference (bp).

c. Reporting and Recordkeeping. Reference (bq) requires permittees to maintain appropriate records and to submit periodic reports to the EPA Administrator, as defined in the permit.

9. CZMA Consistency Determinations.

a. Regulatory Citation. The NOAA regulations in Reference (bq). Marine Corps actions affecting the coastal zone must be as consistent as possible with approved state management plans, unless such consistency is prohibited based upon requirements of existing laws applicable to the installation and the mission of the Marine Corps. Actions affecting the coastal zone include those that take place outside the coastal zone but affect any land or water use or natural resource within the coastal zone.

b. Consistency Determination. The consistency determination may employ any format as long as it complies with the requirements contained in subpart C of reference (br). A consistency determination must be prepared for the following:

(1) Development projects within the coastal zone (subpart 33 of reference (br)).

(2) Nondevelopment projects within the coastal zone which may affect the coastal zone.

(3) Installation- or unit-sponsored actions taking place outside the coastal zone but which may impact the coastal zone.

20105. TERMS AND DEFINITIONS

1. BMP. Methods, measures, or practices selected by an agency to meet its nonpoint source control needs including, but not limited to, structural and nonstructural controls and operation and maintenance procedures (reference

(h)).

2. Coastal State. A state of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. This term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands, and American Samoa (section 304 of reference (bh)).

3. Coastal Waters. In the Great Lakes area, the waters within the jurisdiction of the United States consisting of the Great Lakes, their connecting waters, harbors, roadsteads, and estuary-type areas such as bays, shallows, and marshes; in other areas, those waters, adjacent to the shorelines, which contain a measurable quantity or percentage of sea water, including, but not limited to, sounds, bays, lagoons, bayous, ponds, and estuaries (section 304 of reference (bh)).

4. Coastal Zone. The coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder) that strongly influence each other and that remain close to the shorelines of the several coastal states, as well as islands, transitional and intertidal areas, salt marshes, wetlands, and beaches (section 304 of reference (bh)).

5. Designated Uses. Those uses specified in water quality standards for each water body or segment whether or not they are being attained (reference (bs)). Such uses can include public water supply, contact recreation, noncontact recreation, cold water fishery, warm water fishery, shellfishing, etc.

6. Discharge

a. Under NPDES, the addition of any pollutant or combination of pollutants to waters of the United States from any point source or any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation (reference (c)).

b. Under OPA, includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any pollutant, but excludes discharges in compliance with an NPDES permit under section 402 of reference (a) (reference (bt)).

7. Direct Discharge. A discharge of a pollutant directly into the waters of the United States.

8. Disposal Site. An interim or ultimately approved and precise geographical area within which the dumping of wastes into the ocean is permitted under specified conditions (reference (bu)).

9. Dredged Material. Material that is excavated or dredged from waters of the United States (reference (bd)).

10. Dumping. A disposal and discharge of material, which does not include any

effluent from any outfall structure, that is regulated under the provisions of reference (a), under the provisions of section 13 of reference (bv), or under the provisions reference (bw). Dumping does not mean a routine discharge of effluent incidental to the propulsion of, or operation of motor-driven equipment on, vessels (reference (bl)).

11. Effluent Limitation. Any restriction imposed by the acting director (EPA Regional Administrator or state NPDES-approved program director, as appropriate) on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean (reference (c)).

12. FOTW. A facility that is owned and operated by a department, agency, or instrumentality of the Federal Government, which treats wastewater, a majority of which is domestic sewage, prior to discharge in accordance with a permit issued under section 1342 of reference (bx).

13. Fill Material. Any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body (reference (bd)).

14. Indirect Discharge. A nondomestic discharge introducing pollutants to a POTW or FOTW (reference (c)). For the purposes of this Manual, an indirect discharger would include any industrial activity which discharges non sanitary wastewater or waste into a MCOTW.

15. IWTP. A wastewater treatment facility that treats exclusively non-domestic wastewater.

16. LID. To help protect and restore water quality, LID comprises a set of approaches and practices that are designed to reduce runoff of water and pollutants from the site at which they are generated. By means of infiltration, evapotranspiration, and reuse of rainwater, LID techniques manage water and water pollutants at the source and thereby prevent or reduce the impact of development on rivers, streams, lakes, coastal waters, and ground water.

17. Load or Loading. An amount of matter (material) or thermal energy that is introduced into a receiving water. Loading can be either man-caused (pollutant loading) or natural (natural background loading) (reference (h)).

18. Material. Matter of any kind or description, including, but not limited to, dredged material; solid waste; incinerator residue; garbage; sewage; sewage sludge; munitions, radiological, chemical, and biological warfare agents; radioactive materials; chemicals; biological and laboratory waste; wrecked or discarded equipment; rock; sand; excavation debris; and industrial, municipal, agricultural, and other waste (reference (bl)). This term does not include sewage from vessels as defined in section 312 of reference (a).

19. Navigable Waters. As defined in reference (a), "navigable waters" means the waters of the United States, including the territorial seas.

20. NPDES. The national program for issuing, modifying, revoking, reissuing,

terminating, monitoring, and enforcing permits and for imposing and enforcing pretreatment requirements under sections 307, 318, 402, and 405 of reference (a). The term includes approved state, interstate, or tribal programs (reference (c)). NPDES programs are either EPA or state programs. State programs must be approved and authorized by EPA.

21. Nonpoint Source Discharges. Discharges, typically in the form of runoff, that are not conveyed through a single point source. Major operations that result in nonpoint source discharges include agricultural activities, grazing, timber harvesting, construction, range activities, and improper waste disposal practices.

22. Ocean Waters. Waters of the open seas lying seaward of the baseline from which the territorial sea is measured, including the waters of the territorial sea, the contiguous zone, and the oceans (reference (b)).

23. Permit

a. Under NPDES, an authorization, license, or equivalent control document issued by the EPA or an approved state to implement the requirements of references (c), (by), and (bz). Permit includes an NPDES general permit, but does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit (reference (c)).

b. Under the section 404 program of reference (a), a written authorization issued by an approved state to implement the requirements of reference (bg), or by the Marine Corps under references (ba)-(bf), (bm), and (ca)-(cd), which includes general permits, as well as individual permits (reference (ce)).

24. Point Source. Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, and vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff (reference (c)).

25. Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. A pollutant is not "sewage from vessels" as defined in section 312 of reference (a) or water, gas, or other material that is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well. In this case, the well used either to facilitate production or for disposal purposes is one approved by authority of the state in which the well is located; however, the state must determine that such injection or disposal will not result in the degradation of ground or surface water resources (reference (c)).

26. Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in

wastewater prior to or in lieu of discharging or introducing such pollutants into a POTW. The reduction or alteration may be accomplished by physical, chemical, or biological processes, operational process changes, material substitutions, or by other approved means.

27. POTW. Any device or system (including recycling and reclamation) used in the treatment of municipal sewerage or industrial wastes of a liquid nature which is owned by a state or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment (reference (c)).

28. Runoff. Water that drains overland from any part of a facility.

29. Sediment. Solid material, such as clay, gravel, mud, silt, sand, and organic matter that moves from its site of origin and settles to the bottom of a water course or water body.

30. Septage. The liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or from a holding tank when the system is cleaned or maintained (reference (c)).

31. Sewage Sludge. Any solid, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. It includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment; scum, septage, portable toilet pumpings; type III marine sanitation device pumpings; and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during incineration of sewage sludge (reference (c)).

32. Sewage Sludge Use or Disposal Practice. The collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge (reference (c)).

33. Stormwater. The portion of precipitation that does not naturally percolate into the ground or evaporate but flows via overland flows, channels or pipes into a defined surface water channel or stormwater system during and immediately following a storm event.

34. Territorial Sea. The belt of seas measured from the baseline, in accordance with the Convention on the Territorial Sea and the Contiguous Zone (the line of ordinary low water located along the coast that is in direct contact with the open sea and the line marking the seaward limits of inland waters), and extending seaward at a distance of three nautical miles (reference (az)).

35. Treatment Works Treating Domestic Sewage. A POTW, FOTW, or any other sewage sludge or wastewater treatment device or system, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge (reference (c)).

36. Toxic Pollutant. Any pollutant listed as toxic under section 307(a)(1) of reference (a) or, in the case of sludge use or disposal practices, any

pollutant identified in regulations implementing section 405(d) of reference (a) (reference (c)). Toxic pollutants include those that have been determined by the EPA as causing death, disease, behavioral abnormalities, cancer, genetic mutations, physical deformities, or physiological malfunctions.

37. Underground Injection. A well injection which consists of the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well, where the depth of the well dug is greater than the largest surface dimension (reference (a)).

38. Wasteload Allocation. The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution (reference (h)).

39. Water Quality Standards. Provisions of state or Federal law which consist of a designated use or uses for the waters of the United States, and water quality criteria for such waters based upon such uses (reference (h)).

40. Waters of the United States. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; all other waters, such as intrastate lakes, rivers, perennial and intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, of which the use, degradation, or destruction of could affect interstate or foreign commerce, including any such waters used for recreational, industrial, or other purposes (e.g., fishing, harvesting shellfish, etc.); impoundments of waters otherwise defined herein; tributaries of waters identified above; the territorial seas; and wetlands adjacent to waters identified above (reference (cd)).

41. Whole Effluent Toxicity. The aggregate toxic effect of an effluent measured directly by a toxicity test (reference (c)). Toxicity tests can be conducted to measure "acute" and "chronic" toxic effect.

CHAPTER 20

WATER QUALITY MANAGEMENT

SECTION 2: MARINE CORPS POLICY

20200. GENERAL

1. Marine Corps installations in the United States will comply with all substantive and procedural WQM regulations established by the EPA or those states that have been granted primary enforcement responsibility.
2. Marine Corps installations within foreign countries will comply with the applicable FGS/reference (cf) or reference (cg) if no FGS has been published.

20201. POINT SOURCE CONTROL

1. Marine Corps policy directs the reduction or elimination of wastewater treatment and disposal needs through a P2 program. This program should examine and implement wastewater/stormwater volume and pollutant reductions through process changes, materials substitution, cooling water recycling, water conservation practices and equipment, wastewater reclamation and reuse, and wastewater collection system maintenance and renovation to decrease groundwater infiltration and stormwater inflow. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements. The PPA establishes the following order of preference for the EMH:
  - a. Source reduction.
  - b. Recycling.
  - c. Treatment.
  - d. Disposal.
2. The use of a regional or municipal POTW will be the preferred method for wastewater collection, treatment, and disposal whenever an analysis of life-cycle costs and environmental impacts indicates that the use of a POTW is more economical and environmentally beneficial than constructing/upgrading and operating an FOTW. Economic components used in the analysis should include any capital cost contributions to the POTW for a prorated share of system capacity; continuing user fees and surcharges; pretreatment costs; FOTW capital; operation and maintenance costs, including expenses for permit fees, monitoring, utilities, equipment repair and replacement; solids handling and disposal; chemical usage; and personnel staffing, training, and certification. The environmental analysis should include surface and groundwater quality and quantity issues, threatened and endangered species impacts, and archaeological, cultural, and natural resources issues.
3. The installation and operation of Marine Corps owned wastewater treatment and disposal facilities are authorized whenever a municipal system or other alternatives are not available or cost-effective.

4. The Marine Corps encourages wastewater/stormwater reclamation for reuse; this option should be studied during planning for the construction of new wastewater facilities or for renovation, expansion, or the upgrading of existing facilities. Reuse options pertain to industrial wastewater recycling, aquifer recharge, constructed wetlands, wildlife habitat mitigation or enhancement; to the irrigation of parade decks, athletic fields, golf courses, forests and tree lines, and garrison and residential landscaping; and to outleased areas used for agriculture, silviculture, or grazing.

5. Job descriptions for Marine Corps wastewater treatment plant and collection system operators must require a state certification, or license, or the ability to obtain and maintain a certification or license as a condition of employment at all facilities where state certification requirements apply, as stipulated in reference (ch).

6. The CMC (LF) supports funding for annual refresher training for all plant and collection system operators, especially for safety-related courses. Training sources include the EPA, state environmental and health departments, local colleges and universities, extension courses, and private firms.

7. Marine Corps laboratories which perform wastewater and stormwater analyses as required in permit monitoring conditions must be certified under applicable regulations of the Federal, state, or local permitting authority, if required. Appropriate chain of custody procedures will be used to track samples collected for analysis. Reference (ab) contains EPA test procedures for analyzing water pollutants.

8. A DON policy (reference (v)) regarding treatment and control of stormwater directs the Marine Corps to consider LID in the design for all projects that have a stormwater management element. LID will be implemented in complying with reference (a) and the NPDES permit program, as well as all applicable Federal and state requirements for sustainable development. In those infrequent situations where LID is not appropriate given the characteristics of the site, the Marine Corps is authorized to establish a waiver process that, if used, would include regional engineer level review and approval (contact HQMC for further information).

20202. NONPOINT SOURCE CONTROL

1. Marine Corps installations must implement BMPs to control nonpoint source pollution.

2. Stormwater from MILCON projects that increase impervious surfaces must be managed in accordance with state regulations and engineering practices that manage the quantity and quality of stormwater runoff.

3. Lease terms for agricultural, silvicultural, and grazing operations will include requirements for implementing BMPs for pesticide, fertilizer, and erosion controls to reduce contaminated runoff.

20203. SEPTAGE TREATMENT AND DISPOSAL

1. Marine Corps installations with septic tanks will ensure that these tanks

do not contaminate adjacent surface waters or groundwaters.

2. A periodic inspection program must be developed to determine when pumping is required and if any structural defects, such as broken baffles or cracked pipes, exist. The recommended frequency is every four to five years.

3. Marine Corps installations may select their own preferred method of septage disposal. If land disposal is selected, the installation or its contractor must adhere to the requirements in reference (ai).

#### 20204. GROUNDWATER PROTECTION

1. Underground injection of wastes will be used only as a last resort at Marine Corps installations after all other disposal alternatives have been considered and rejected as unfeasible. Any underground injection well, including those within Class V, will be operated in compliance with the UIC program and applicable permits.

2. Marine Corps installations will inventory all Class V wells to determine whether pollutants are discharged into underlying aquifers. Class V wells include certain septic system wells and cesspools, stormwater drainage wells, and dry wells used for waste disposal, such as those found in motor pools. Note that in 1999 EPA added new requirements for large-capacity cesspools and motor vehicle waste disposal wells. The Class V Rule prohibits new large-capacity cesspools and new motor vehicle waste disposal wells nationwide. The rule also phased out existing cesspools nationwide by April 2005. Operators of existing motor vehicle wells in regulated areas must either close their wells or obtain a permit.

#### 20205. SEWAGE SLUDGE USE AND DISPOSAL

1. The preferred method of sewage sludge disposal is the beneficial use at land application sites, as regulated under reference (ah). This method requires the effective pretreatment of industrial wastes, including proper management of oil/water separators, to prevent contamination of sewage sludge. An effective monitoring program is also necessary to ensure compliance with subpart B requirements.

2. If sewage sludge is transported off site for disposal, the installation will ensure that the disposal agent acts in accordance with applicable regulations and permits.

#### 20206. DREDGE AND FILL OPERATIONS

1. Marine Corps installations proposing to undertake any action requiring a USACE permit must apply to the USACE District Engineer for the district in which the proposed activity is to be conducted. The installation may request assistance in preparing and submitting the permit application. Whenever a potential requirement for a USACE permit under this section is identified, initiate consultation with the CMC (LF).

2. An analysis per reference (bi) must be conducted for any actions that will require an individual permit for dredge and fill activities or the loss of wetlands. Because this process is complex and lengthy, it must be initiated well in advance of developing and filing the permit applications. Further information on the process per reference (bi) is provided in chapter 12 of this Manual.

3. USACE permits are required by Marine Corps installations for the following actions:

a. The construction of a dam or dike (reference (bb)).

b. The construction of a structure in, or one that will affect, waters of the United States (reference (bc)).

c. Dredging projects for navigation to enhance morale, welfare, and recreational activities (reference (bc)).

d. The discharge of dredged or fill material into the navigable waters of the United States, including wetlands (reference (bd)).

e. The transportation of dredged material for dumping in ocean waters (reference (bd)).

4. Existing disposal sites, approved by the USACE, should be used wherever possible. Proposed new disposal sites should be identified and reported to the cognizant USACE district engineer for evaluation and approval two to three years before project initiation.

5. If a land disposal site is proposed, consideration must be given to the liquid runoff and leaching potential of undesirable chemical constituents and to any NPDES-permit requirements. Requests for revalidation of existing permits for maintenance dredging and disposal must be received by the USACE at least 6 months prior to expiration of the permit.

6. A permit for maintenance dredging will include an expiration date that will not extend more than ten years from the issue date. A request for renewal from the USACE must be filed with the cognizant District Engineer at least one year before expiration.

7. Support may be requested, on a cost-reimbursable basis, to prepare or assist in the preparation of an EA/EIS for projects requiring a USACE permit.

8. Early planning for dredge spoil disposal site selection, preparation, and use is essential to avoid unnecessary costs and delays.

20207. OCEAN DUMPING. Except in emergency situations (e.g., jet fuel dumped from aircraft in an emergency situation to safeguard life), ocean dumping may be authorized only on a case-by-case basis by the EPA. Requests for such authorization must be accompanied by an EA (see chapter 12 of this Manual). Full compliance with EPA regulations (references (bl), (bn) through (bq), bu), and (ci) through (cl)) is required.

20208. CZMA CONSISTENCY DETERMINATIONS. Marine Corps installations must review proposed actions to identify those that directly affect the coastal zone. For all activities affecting the coastal zone, provide a consistency determination to the appropriate state agency at least 90 days prior to final approval for the activity.

CHAPTER 20

WATER QUALITY MANAGEMENT

SECTION 3: RESPONSIBILITIES

20300. CMC (LF)/COMMANDER MCICOM

1. Provide information and advice to installation commanders and tenants regarding proposed and final rules and regulations pertaining to WQM and uniformly apply Marine Corps policy as set forth in the Manual.
2. Assist installations in resolving disputes with Federal, state, local, and foreign regulatory agencies as required.
3. Conduct special environmental compliance and protection studies with regard to WQM to assist in establishing policy or initiating actions.
4. Ensure, through field visits and the ECE Program, Marine Corps cooperation and compliance with Federal, state, and local regulatory agencies with regard to water quality regulations.
5. Track Marine Corps progress toward meeting established water quality goals.

20301. CG/CO OF MARINE CORPS INSTALLATIONS AND COMMARFORRES

1. Identify and submit to the CMC (LF) project documentation and funding requests for WQM facilities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with WQM requirements. Pay appropriate Federal, state, and local fees. Ensure that the EMH is employed, P2 alternatives evaluated, and life-cycle cost impacts assessed, in evaluating and selecting projects that address compliance requirements.
2. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for construction of all WQM projects.
3. Ensure that a base or station order is written to implement the specifications of this chapter. This requirement can be accomplished either by writing a comprehensive base order to implement all of this Manual, or by writing a separate base order to implement the contents of this chapter alone.
4. Identify and submit to the CMC (LF) project documentation and funding requests for wastewater sources, collection systems, and treatment facilities that are required to maintain compliance with applicable existing and emerging regulations and permits. Program and budget for personnel, equipment, materials, training, and monitoring required to comply with wastewater treatment requirements.
5. Ensure that all required Federal, state, and local permits are applied for and obtained. Sign certifications and permit applications, as required, for

construction of all wastewater treatment projects.

6. Identify applicable effluent limitations, new toxic pollutant effluent standards, pretreatment standards, wastewater discharge problems associated with solid waste disposal sites, and nonpoint source requirements pursuant to regional plans under section 208 of reference (a).

7. Coordinate the review of all projects for the construction of new or upgraded treatment works with the appropriate EPA, state, and regional offices to ensure early identification of discharge permit conditions and limits, siting restrictions, innovative treatment alternatives, wastewater reclamation criteria, and sewage sludge use or disposal options.

8. Use innovative treatment technology where technically and economically feasible in the designs for the construction of new or the upgrading of existing wastewater treatment plants.

9. Ensure that management programs and controls exist to comply with applicable regulations, permit limits, monitoring, recordkeeping, and reporting requirements for wastewater and stormwater discharges from point and nonpoint sources.

10. Identify training and certification needs for operators of treatment and collection system facilities, and allocate needed resources.

11. Use municipal or regional wastewater collection and disposal systems to the maximum extent feasible.

12. Maintain a liaison with the USACE and state or area-wide planning organizations to ensure that Marine Corps interests are considered during regional wastewater treatment planning or to facilitate dredge/fill projects.

13. If responsible for operation of a FOTW:

a. Notify the cognizant permitting agency of any changes in wastewater input to the treatment plant that may affect the ability of the plant to comply with applicable requirements.

b. Operate and maintain the collection system, treatment works, and effluent discharge facilities to ensure compliance with applicable permit requirements.

14. Provide the resources for monitoring, sampling, and testing, as well as for maintaining and demonstrating compliance with permit and pretreatment requirements; maintain records of all monitoring information.

15. Identify P2 measures, devices, systems, and procedures to reduce the total generation of wastewater volume and pollutants.

16. Ensure that adequate access to wastewater generating and treatment facilities is provided to the EPA, state, and local pollution control authorities for the purpose of waste stream sampling and the inspection of operations and records.

17. Ensure that coordination occurs as appropriate with the Safety Office in matters relating to wastewater discharges, sewage sludge use or disposal, dredge and fill operations and, POL management.

20302. COMMANDERS RESPONSIBLE FOR DISCHARGES TO FOTWS AND POTWS

1. Comply with all applicable pretreatment requirements. This includes providing the necessary resources for monitoring, sampling, recordkeeping, and reporting.
2. Implement procedures to notify operators of treatment works receiving Marine Corps discharges of any changes in discharges or of accidental pollutant discharges.

REFERENCES

- (a) 33 U.S.C. 1251 et seq.
- (b) Executive Order 12088, "Federal Compliance with Pollution Control Standards," October 13, 1978
- (c) 40 CFR 122
- (d) 40 CFR 125
- (e) SECNAV M-5210.1
- (f) 40 CFR 403
- (g) 40 CFR 405-471
- (h) 40 CFR 130
- (i) 40 CFR 116
- (j) 40 CFR 117
- (k) 42 U.S.C. 6901 et seq.
- (l) 40 CFR 270
- (m) 40 CFR 260
- (n) 42 U.S.C. 6901 et seq.
- (o) 40 CFR 261
- (p) Public Law 102-386, "Federal Facilities Compliance Act," October 6, 1992
- (q) DUSD Memorandum, "Perchlorate Release Management Policy," April 22, 2009
- (r) HQMC Memorandum, "Distribution of DOD Perchlorate Release Management Policy," January 6, 2010
- (s) DUSD Memorandum, "Policy on DOD Required Actions Related to Perchlorate," January 26, 2006
- (t) HQMC Memorandum, "Perchlorate Sampling and Management Policy," April 11, 2006
- (u) Public Law 110-140, "Energy Independence and Security Act," December 19, 2007
- (v) Department of Navy policy (dated 19 November 2007)
- (w) Unified Facilities Criteria (UFC) 3-210-10, "Low Impact Development"

(x) EPA's Reducing Stormwater Costs through Low Impact Development Strategies and Practices

(y) EPA Publication Storm Water Management For Industrial Activities: Developing P2 Plans and BMPs

(z) EPA Publication Storm Water Management for Construction Activities: Developing P2 Plans and BMPs

(aa) The EPA's Guidance Manual for the Preparation of NPDES Permit Applications for Stormwater Discharges Associated with Industrial Activity (EPA-505/8-91-002)

(ab) 40 CFR 136

(ac) 40 CFR 445

(ad) EPA's Guidance Manual for Developing Best Management Practices (BMP), October 1993

(ae) 40 CFR 258

(af) EPA Publication, *Nonpoint Source Watershed Workshop* (EPA/625/4-91/027)

(ag) Guide to Nonpoint Source Pollution Control (EPA/811/1987.6)

(ah) 40 CFR 257

(ai) 40 CFR 503

(aj) 40 CFR 146

(ak) Guide to Septage Treatment and Disposal (EPA/625/R-94/002)

(al) EPA Handbook: Septage Treatment and Disposal (EPA-625/6-84-009)

(am) 42 U.S.C. 300f et seq.

(an) 40 CFR 144

(ao) 40 CFR 145

(ap) 40 CFR 147-148

(aq) EPA Technical Assistance Document, A Review of Sources of Groundwater Contamination from Light Industry (EPA 440/6-90-005)

(ar) A Groundwater Information Tracking System with Statistical Analysis Capability (EPA/625/11-91/002)

(as) 42 U.S.C. 103

(at) 40 CFR 268

(au) 40 CFR 258  
(av) 40 CFR 240  
(aw) 40 CFR 257  
(ax) 42 U.S.C. 7401 et seq.  
(ay) 40 CFR 61  
(az) 40 CFR 230  
(ba) 33 CFR 320  
(bb) 33 CFR 321  
(bc) 33 CFR 322  
(bd) 33 CFR 323  
(be) 33 CFR 325  
(bf) 33 CFR 330  
(bg) 40 CFR 233  
(bh) 16 U.S.C. 1451-1464  
(bi) 42 U.S.C. 4321 et seq.  
(bj) 33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.  
(bk) 40 CFR 255  
(bl) 40 CFR 220  
(bm) 33 CFR 324  
(bn) 40 CFR 221  
(bo) 40 CFR 222  
(bp) 40 CFR 227  
(bq) 40 CFR 224  
(br) 15 CFR 930  
(bs) 40 CFR 131  
(bt) 40 CFR 112

- (bu) 40 CFR 228
- (bv) 33 U.S.C. 403
- (bw) 42 U.S.C. 2011 et seq
- (bx) 33 U.S.C. 1251 et seq.
- (by) 40 CFR 123
- (bz) 40 CFR 124
- (ca) 33 CFR 326
- (cb) 33 CFR 327
- (cc) 33 CFR 328
- (cd) 33 CFR 329
- (ce) 40 CFR 232
- (cf) Japan Environmental Governing Standards
- (cg) Overseas Environmental Baseline Guidance Document
- (ch) Federal Personnel Manual (Supplement 271-1, subchapters 3-4, "License and Credentials")
- (ci) 40 CFR 223
- (cj) 40 CFR 225
- (ck) 40 CFR 226
- (cl) 40 CFR 229

CHAPTER 21

WASTE MILITARY MUNITIONS AND  
MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVE HAZARD

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CHAPTER 21

WASTE MILITARY MUNITIONS AND  
MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVE HAZARD

SECTION 1: INTRODUCTION

21100. PURPOSE. This chapter establishes Marine Corps policy and responsibilities for managing WMM and material potentially presenting an explosive hazard (MPPEH).

21101. APPLICABILITY. See chapter 1.

21102. BACKGROUND

1. WMM. Under Federal regulations, military munitions may be considered HW military munitions and subject to regulation by the EPA or a state and/or locality.

2. MPPEH. Various activities and operations aboard Marine Corps installations such as range clearance, munitions responses, QRPs, and DRMO manage MPPEH. Such material must be evaluated to identify the associated explosive hazards prior to release within or external to the DOD.

21103. FEDERAL REQUIREMENTS

1. RCRA of 1976 (42 U.S.C. 6901 et seq.). Congress enacted RCRA to protect human health and the environment from hazards associated with solid waste (SW) and HW generation, transportation, treatment, storage, and disposal. Major RCRA revisions are included in the FFCA.

2. FFCA, Section 107; P.L. 102-386, 1992; 42 U.S.C. 3004(y). FFCA section 107, added as section 3004(y) of RCRA, required the EPA, in consultation with DOD, to promulgate regulations identifying when military munitions become HW and to provide for the safe management of such wastes.

3. Military Munitions Rule (MR): 40 CFR Part 266, Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Systems - Subpart M Military Munitions, 12 February 1997. The MR identifies requirements for management of WMM and explosives or munitions emergency responses.

21104. REGULATORY CONCEPTS

1. When Munitions are not Waste. Military munitions are not considered regulatory SW or HW if they are used for authorized training, testing, evaluation, are being repaired or reclaimed/recycled, or are destroyed during operational range clearance.

2. Unused SW Military Munitions. Unused military munitions are considered regulatory SW and potentially HW if they are:

- (a) Buried, landfilled, burned for disposal, incinerated, or treated prior

to disposal.

(b) Removed from storage for the purpose of disposal or treatment prior to disposal.

(c) Deteriorated, leaking, or are damaged to the point that they can no longer be put back into serviceable condition and cannot be reasonably recycled or used for other purposes.

(d) Declared a SW by an Authorized Military Official.

3. Used or Fired SW Military Munitions. Military munitions that have been used or fired are considered SW and potentially HW when they are transported off-range for the purpose of treatment or disposal; disposed by burial; or are fired, land off-range, and are not promptly rendered safe or retrieved.

4. HW Military Munitions Accumulation and Storage. Storage of HW military munitions must comply with DOD, DON, and Marine Corps explosives safety policies and regulations, regardless whether HW military munitions are accumulated on site for less than 90 days or are stored under a CE or in a permitted storage facility.

a. CE for HW Military Munitions Storage. The MR allows HW military munitions to be stored under CE from standard RCRA HW storage requirements if those HW military munitions are stored under DOD Explosives Safety Board (DDESB) standards. Additional CE storage conditions are identified in the MR.

b. Other HW Accumulation and Storage. If HW military munitions cannot be stored under a CE, then they may be stored under Subpart EE, Hazardous Waste Munitions and Explosives Storage regulations (references (a) and (b)). Chapter 9 of this Manual discusses regulatory HW storage requirements.

#### 5. HW Military Munitions Transportation

a. General. Subject to more stringent state and/or local requirements, the MR does not regulate HW military munitions transportation occurring on a public or private right-of-way that is within or immediately alongside of an installation boundary.

b. CE for HW Military Munitions Transportation. The MR allows HW military munitions to be transported under CE from standard RCRA HW transportation requirements if those HW military munitions are transported under DDESB standards and DOT regulations. The HW military munitions must be transported from a military-owned or operated installation to a military-owned or operated treatment, storage, or disposal facility. All states within the route of travel must recognize Federal EPA CE for transportation. Additional CE transportation conditions are identified in the MR.

c. Transportation Requirements When a CE is Not Applicable. If CE transportation is not applicable, then transportation of HW military munitions must comply with all Federal, state, and local HW transportation requirements. The installation environmental staff shall be contacted prior to shipment of any HW military munitions.

## 6. Training Requirements

a. General Personnel Training. Installation environmental personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their HW military munitions duties in a way that ensures compliance with RCRA. At a minimum, the training must ensure that personnel are able to respond to emergencies such as fires, explosions, or groundwater contamination incidents.

b. Environmental Training Recordkeeping. Units shall maintain their environmental training records and have them available for inspection.

### 21105. TERMS AND DEFINITIONS

1. HW. A SW that is hazardous, as defined in reference (c).
2. HW Military Munitions. Military munitions that meet the definition of HW as defined in reference (d).
3. MPPEH. Defined in reference (e). Material owned or controlled by the DOD that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris) or potentially contains a high enough concentration of explosives that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization, or disposal operations). Excluded from MPPEH are munitions within the DOD-established munitions management system and other items that may present explosion hazards (e.g., gasoline cans and compressed gas cylinders) that are not munitions and are not intended for use as munitions.
4. Material Documented as Safe (MDAS). Defined in reference (e). MPPEH that has been assessed and documented as not presenting an explosive hazard and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.
5. Material Documented as an Explosive Hazard (MDEH). Defined in reference (e). MPPEH that cannot be documented as MDAS, that has been assessed and documented as to the maximum explosive hazards the material is known or suspected to present, and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.
6. Military Munitions. Defined in reference (d). The Federal regulatory definition means all ammunition products and components produced or used by or for the DOD or the U.S. Armed Services for national defense and security, including military munitions under the control of the DOD, the U.S. Coast Guard, the DOE, and National Guard personnel. The term, "military munitions," includes: confined gaseous, liquid, and solid propellants; explosives; pyrotechnics; chemical and riot control agents; smokes; and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines,

torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations have been completed.

7. Military Range. Defined in reference (f). The Federal regulatory definition means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

8. Operational Range. Defined in reference (f). A military range that is used for range operations and activities, or a military range that is not currently being used, but that is still considered to be a range, is under the jurisdiction, custody, or control of the DOD, and has not been put to a new use that is incompatible with range activities. Operational ranges include both "Active Ranges" (i.e., currently in service or use) and "Inactive Ranges" (i.e., not in current use or service).

9. SW. Discarded material as defined in reference (g).

CHAPTER 21

WASTE MILITARY MUNITIONS AND  
MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVE HAZARD

SECTION 2: MARINE CORPS POLICY

21200. GENERAL. Installations shall manage HW military munitions in compliance with all applicable regulations.

21201. APPLICATION OF REGULATORY CONCEPTS

1. Definition of Military Munitions

a. Demonstrations. Commercial ammunition or explosives used in air shows or other demonstrations that are authorized by installation commanders may be managed as military munitions because they improve morale, encourage recruitment and retention, and highlight the Marine Corps and DOD support of national security.

b. Confiscated. Any ammunition or explosives confiscated by any DOD law enforcement agency (i.e., Naval Criminal Investigative Service, Criminal Investigations Divisions, Marine Corps Police Department, etc.) operating on board a Marine Corps installation may be managed as military munitions because that ammunition is being controlled by the DOD for the safety and security of a Marine Corps installation and its support of national security.

c. Bird Abatement Strike Hazard (BASH) Program. Any ammunition or explosives used for BASH programs may be managed as military munitions because protection of DOD aircraft from bird strikes supports national security.

d. Amnesty Program. Amnesty programs are intended to manage ammunition that is 0.50 caliber or less. Any such ammunition being managed by an Amnesty Program will be managed as military munitions because that ammunition is being controlled by the DOD for the safety and security of a Marine Corps installation and its support of national security. Further, any evaluation as to the true origins of the ammunition that is necessary to identify it as military munitions is contrary to the assumption of anonymity of users of the program and may preclude the use of the program.

2. Buried or Abandoned. Military munitions buried or placed into trash containers, recycling bins, or other similar containers is a WMM at the time of burial or placement. It does not matter if the person responsible for such burial or abandonment did so without authorization or knowledge of the repercussions. Such military munitions will from then on be managed as Condition Code V WMMs. These munitions will not be "unwasted" and no attempt will be made to return those munitions to the serviceable stockpile.

3. Authorized Military Official. The DDA is the only Authorized Military Official in the Marine Corps. The DDA is the only person in the Marine Corps that can declare a military munition to be waste, Condition Code V. The DDA does not have authority to reclassify munitions that are properly identified as waste back into any other Condition Code besides V.

4. General Personnel Training and Recordkeeping. At least one person at each ammunition supply point (ASP) and EOD unit shall receive training that complies with reference (h). Environmental training records must be retained on board the installation and may be destroyed three years after personnel have left the installation for permanent change of station.

21202. WMM MINIMIZATION. The Marine Corps shall reduce the quantity of HW disposed of by proper military munitions stockpile management and leveraging of DOD munitions reclamation/resource recovery capability.

21203. RANGE OPERATIONS

1. Military Munitions Used for Intended Purpose

a. Use for Intended Purpose. Military munitions are not considered SW or HW if they are used for their intended purpose. The following are examples of intended use:

(1) Military Training. Training includes use of military munitions to sustain or enhance Marine Battle Skills, MOS skills, or ITS in accordance with applicable orders and directives. Emergency Destruction Training and EOD inerting training are also legitimate training activities. EOD can also use explosives or emergency responses as an opportunity to conduct legitimate training, although this does not mean the emergency is over and is not considered intended use of the item.

(2) Unused Propellant. Destruction of unused propellant, when such destruction is conducted as a result of MOS training required by an ITS.

(3) Operational Range Clearance. Military munitions being destroyed as part of operational range clearance for the safe and sustainable use of operational ranges are considered use for intended purpose.

2. Operations Subject to the MR. The following activities are subject to provisions of reference (f) and/or other applicable Federal, state, and/or local HW management requirements (note: some of the activities are prohibited by Marine Corps policy):

a. Used Military Munitions Transported Off-Range for Disposal. Used military munitions, if recovered and removed from an operational range for the purpose of storage or treatment prior to disposal, are considered SW and potentially HW military munitions. Military munitions removed from an operational range for RDT&E; reuse; or repair are not SW until declared so by the DDA.

b. Burial. Unused or used military munitions disposed of by deliberate burial on or off an operational range are SW and will be managed as such. Disposal by burial or burial in an attempt to circumvent ammunition turn-in procedures is strictly prohibited. At no time will buried munitions be managed as anything other than SW. Similarly, munitions deposited in SW dumpsters or other containers as a means of disposal or to circumvent turn-in will be managed as SW.

c. Fired Off-Range. Military munitions that land off an operational range that are not promptly rendered safe in accordance with EOD 60-series publications and/or retrieved are SW.

### 3. Recordkeeping

a. Range Records. All operational range use and military munitions expenditures will be permanently recorded. Such records will include the following information:

(1) Expenditure of all military munitions including military munitions type, quantity, location, using unit, and estimated dud rate.

(2) Operational range clearance operations or EOD incidents conducted on or off operational ranges including military munitions type, quantity, and location.

(3) The coordinates of all areas known or suspected of containing UXO.

(4) The records mentioned above must be retained on board and cannot be destroyed.

#### 21204. EXPLOSIVE OR MUNITIONS EMERGENCY RESPONSES

1. Explosives or Munitions Emergency. EPA HW management guidance is limited when explaining what constitutes an explosive or munitions emergency. Accordingly, the DOD has established two levels of emergency response. These levels are determined by on-scene EOD response personnel.

a. Level 1 Response. A Level 1 response requires immediate response activities to eliminate the actual or potential imminent threat to human health and/or the environment. A Level 1 emergency exists if:

(1) The risk associated with the munitions movement is not acceptable.

(2) A munition may be sufficiently stable for careful movement to an isolated, protected location for immediate rendering-safe or destruction, but the risk associated with temporary storage is not acceptable.

(3) A delay in response will compromise safety of human health or the environment.

b. The lead onsite EOD specialist will determine whether a Level 1 emergency response is required and when to terminate the response.

c. When environmental regulators and safety officials raise a concern with a proposed response action or a planned protective measure, the concerns should be raised to the appropriate-level DOD authority for resolution using the collaborative decision making process.

d. A Level 1 emergency can occur anywhere and could involve defusing, detonation, or other actions to neutralize a munition "in-place," or movement

to a safer location, including to an operational range used by or limited to EOD operations, to defuse, detonate, or otherwise abate the immediate threat.

e.. Level 2 Response. A Level 2 emergency also poses an actual or potential imminent threat to human health and/or the environment, but does not require immediate response activities to eliminate or address the actual or potential imminent threat. A Level 2 Emergency exists if:

(1) The risk associated with movement and storage is acceptable. The munition is positively identified, is safe for standard transport, and can be stored (temporarily) within DOD's munitions logistic management system pending appropriate response action (e.g., on-site destruction or movement to a safe destruction facility).

(2) The response actions can be delayed without compromising safety.

(3) Level 2 emergency response activities can be delayed without compromising safety or increasing the risks posed to life, property, health, or the environment.

f. During a Level 2 emergency, EOD specialists shall collaborate or ensure the supported installation's or agency's environmental office consults with environmental regulators and safety officials regarding the appropriate course of actions (e.g., whether to seek a RCRA emergency permit under part 61 of reference (i)). Should disagreement arise, resolve at the appropriate level.

g. Responses to Level 2 emergencies may involve locations both on and off DOD installations and may be determined, conducted, and terminated by EOD personnel or, when specifically authorized by DOD, by other qualified explosives or munitions emergency response specialists in collaboration with environmental regulators and safety officials, as described above.

h. The distinction between Level 1 and Level 2 emergencies are normally based on the lead onsite explosives or munitions emergency response specialist's determination as to whether delaying the necessary response action increases the risks posed by the situation (i.e., a delay might increase the probability of an unintentional deleterious event, or a delay might cause the consequences of such an event to worsen, or both). However, environmental regulators and safety officials should be afforded, when the situation allows, input to these determinations.

## 2. Response Procedures for Level 1 and Level 2 Emergencies

a. Environmental regulators and safety officials who oversee emergencies may have an independent authority, responsibility and/or the technical expertise to evaluate the public safety and environmental aspects of response actions. DOD will collaborate with environmental regulators and safety officials to achieve mutual agreement for managing potential adverse impacts (e.g., timing, noise, security, environmental impacts) of an emergency response action. During such collaboration, protective measures must be maintained to ensure explosives safety.

b. Responses to Level 1 Emergencies

(1) When EOD personnel initially respond to a request for support to an explosives or munitions emergency, they assume, from an explosives safety standpoint, that it is a Level 1 emergency.

(2) Upon arrival the lead on-site explosives or munitions emergency response specialist shall assess whether response action delays may be tolerated (i.e., declare the situation is a Level 2 emergency) and ensure immediate response actions necessary to control or eliminate imminent threats to human health (including safety) or the environment (including property) are taken. Such immediate actions may include transporting the item posing the explosive hazard to an appropriate location for defusing, detonation, or the application of render-safe procedures.

(3) When extenuating circumstances (e.g., adverse weather, nightfall, other safety considerations) delay actions necessary to complete a response, the response may be delayed until the necessary action may be completed safely. The lead onsite explosives or munitions emergency response specialist will ensure the site remains safe and secure during such delays. All delays should be documented on appropriate incident response records.

(4) Only the lead onsite explosives or munitions emergency response specialist shall declare when a Level 1 emergency is over.

(5) There are no Federal, DOD, or Marine Corps requirements for obtaining environmental permits before, during, or after conducting Level 1 responses.

(6) EOD may take the opportunity to train EOD personnel during Level 1 emergencies. Such training does not indicate the emergency is over nor does it impact permitting decisions or change the emergency into a training event.

c. Responses to Level 2 Emergencies

(1) Responses to Level 2 emergencies are subject to Federal, state, and/or local HW management requirements (e.g., emergency permits may be required). If the lead onsite explosives or munitions emergency response specialists has declared that response actions can be delayed without increasing the risks posed, then an emergency permit should be requested. The explosives or munitions emergency response specialists should coordinate with the applicable host installation's environmental office which will consult with the appropriate regulatory authority on the applicability of emergency permitting.

(2) The following information, as a minimum, should be provided when pursuing an emergency permit:

(a). Type of explosives or munitions involved, if known.

(b). Manner and location (e.g., permitted sites) of proposed treatment, storage and/or disposal.

(c). Manner in which the explosives or munitions (waste) will be transported to another site, if required.

(d). When an off-installation explosives or munitions emergency response that involves only non-military munitions or explosives requires an emergency permit, the civilian authority requesting DOD support is responsible for conducting the permitting activities typically conducted by host installation environmental offices.

(3) Procedures for obtaining emergency permits should be included in all Memoranda of Understanding (MOUs) with applicable Federal, state, and/or local authorities.

(4) EOD may take the opportunity to train EOD personnel during Level 2 emergencies. Such training does not indicate the emergency is over nor does it impact permitting decisions or change the emergency into a training event.

d. Environmental Cleanup after Termination of Emergencies. DOD explosives or munitions emergency response specialists are not responsible for environmental cleanups that may be required after completion of immediate response actions necessary to address Level 1 or Level 2 emergencies. The Marine Corps will normally be responsible for conducting any appropriate environmental cleanups when military munitions are involved. When military munitions are not involved, non-Marine Corps entities are normally responsible for any required environmental cleanup.

3. EOD Recordkeeping. EOD shall maintain call sheets for all emergency responses. The aforementioned records must be retained on board and cannot be destroyed.

21205. MPPEH. Installations shall develop and execute MPPEH management procedures in accordance with reference (e).

1. Overall Process. Installations shall establish a process that ensures unknown explosive hazards are not present when transferring MPPEH, MDEH, or MDAS within the DOD, transferring MDEH to a qualified receiver, or releasing MDAS to the public.

2. Visual Inspections. Visual inspections may be used when safety can be assured, but are not always sufficient for providing assurance that MPPEH does not present an explosive hazard. Other DDESB-approved means (e.g., thermal treatment) may have to be used to ensure that a release or transfer does not present an explosive hazard to a receiver. Demilitarization procedures established by the DLA, the DOD Components, or the Single Manager for Conventional Ammunition shall address when visual inspection is appropriate and the procedures that may be used to inspect or process MPPEH. Documentation requirements for inspections or processes conducted on MPPEH shall be included in the management procedures.

3. Closed Circuit Process. For munitions debris and range-related debris, consideration shall be given to use of a closed-circuit process managed by a single entity that maintains a chain of custody from collection through release

from DOD control as MDAS.

4. Two Conditions for Documentation. Installations shall require that the explosives safety status of material to be transferred within or released from DOD control be assessed and documented as either safe or as having known or suspected explosive hazards based on one of the following two conditions:

a. After a 100 percent inspection and an independent 100 percent reinspection.

b. After processing by a DDESB-approved means with an appropriate post-processing inspection.

5. Receiver Qualifications. Installations shall ensure that MPPEH and MDEH are transferred or released only to those DOD Components and personnel or non-DOD entities or individuals that:

a. Have the licenses and permits required to receive, manage, and process the materials.

b. Have technical expertise about the known or suspected explosive hazards associated with the MPPEH or MDEH being received.

c. Are qualified to receive, manage, and process MPPEH or MDEH in accordance with this Manual and any implementing guidance.

d. Have personnel who are:

(1) Experienced in the management and processing of materials with explosive hazards equivalent to the MPPEH or MDEH being received.

(2) Also trained and experienced in the identification and safe handling of used and unused military munitions and any potential explosive hazards that may be associated with the specific MPPEH or MDEH being received.

e. Require an explosives risk evaluation before allowing the DOD Components or non-DOD entities or individuals to receive, manage, or process MPPEH or MDEH. This explosives risk evaluation process will evaluate the adequacy of the receiver's management controls (e.g., training, oversight, recordkeeping) and operations (e.g., processing methods, equipment, storage facilities).

f. Ensure that only MDAS is released to the public.

6. Evaluation of Receiver Qualifications. Installations shall verify that a documented evaluation indicates that the receiver of MPPEH or MDEH meets applicable requirements prior to the transfer within or release from DOD control of such material.

7. Personnel Training. Installations shall ensure that personnel who inspect, process, or document material as safe or hazardous shall be trained in:

a. Recognition and safe handling of used and unused military munitions and

specific types of MPPEH. When appropriate, such personnel shall be qualified according to reference (j) or trained in accordance with DOD Component policy and guidance for training and qualifying personnel who handle military munitions.

b. Demilitarization and trade security controls and procedures that apply to MPPEH, MDEH, and MDAS that is to be released from DOD control.

c. Identification, management (e.g., marking, segregating, securing), and processing (e.g., flash burning, complying with HM and HW transportation regulations) requirements that apply to specific types of MPPEH or MDEH.

8. Personnel Qualifications. Installations shall ensure that personnel who inspect, process, or document material as safe or hazardous shall:

a. Demonstrate or provide proof of adequate training and experience in the recognition and safe handling of used and unused military munitions and other MPPEH and in the processing of MPPEH.

b. Be certified, in writing, by the installation commander directly responsible for controlling the transfer or release of MPPEH, MDEH, or MDAS, as being technically qualified according to the standards provided in this Manual for management of MPPEH to perform such functions and, in the case of contractor personnel, be certified in conformance with contract requirements.

c. Inspect and reinspect, or process and inspect, and document material as either MDEH or MDAS.

9. Commingling. Installations shall ensure the chain of custody remains intact through release from DOD control by ensuring that MPPEH awaiting documentation of its explosives safety status, MDEH, and MDAS are not commingled.

10. Containers. Installations shall ensure that containers and holding areas for material being processed are secured and clearly marked as to:

a. The hazards, if any, that may be present.

b. The inspection and re-inspection (or processing and inspection) and documentation of the explosives safety status of the material present.

11. Explosives Safety Siting. Installations shall obtain required explosives safety siting approval for locations (MPPEH or MDEH processing points) used for MPPEH processing operations (e.g., consolidation, inspection, sorting, storage, transfer, release).

12. Material Accumulation. Installations shall minimize the quantity and time MPPEH is accumulated and retained at any location. (Under some circumstances the accumulation of MPPEH, including "speculative accumulation," or its movement from either an operational range or the site of use, could require its management as WMM under applicable Federal or state requirements.)

13. Chain of Custody. Installations shall ensure that chain of custody is

maintained until MDEH or MDAS is released from DOD control. A legible copy of the documentation of the determination of the material's explosives safety status shall accompany the material when it is transferred out of DOD control. This documentation shall be retained per reference (k), Standard Subject Classification Code 5090.4. MDEH and MDAS are no longer considered to be MPPEH as long as the chain of custody remains intact.

a. Documentation of the determination of the material's explosives safety status must state either that the material does not present an explosive hazard and is consequently safe from an explosives safety perspective for transfer within or release from DOD control, or that it is hazardous with the known or suspected explosive hazards stated and is only transferable or releasable to a qualified receiver.

b. The documentation of material as safe requires two independent signatures by trained and certified personnel. The first signatory must be technically qualified and may be either a DOD employee or a DOD contractor. This first signatory must have performed or witnessed the initial 100 percent inspection or DDESB-approved processing of the material. The second signatory must be a technically qualified U.S. citizen who may be either a DOD employee or a DOD contractor. This second signatory must have performed or witnessed the independent 100 percent reinspection or conducted an independent quality assurance inspection of processed material using an approved sampling method. Each signatory must ensure the chain of custody was maintained before signing the explosives safety documentation.

c. When a visual inspection allows the MPPEH to be documented as to the hazard it is known or suspected to present, documentation of the determination of the material's explosives safety status as MDEH only requires one signature.

14. Database of Releases and Transfers. Installations shall ensure that a database is maintained to record any reports of incidents when an unauthorized transfer or release of MPPEH occurred, MDEH was transferred or released to an unqualified receiver or presented an unintentional explosive hazard to a qualified receiver, or MDAS was released that was subsequently found to contain an explosive hazard. Ensure that quarterly summaries of the transactions recorded in this database are provided to MARCORSSYSCOM Program Manager Ammunition and CMC (LF).

#### 21206. MUNITIONS DISPOSITION PROCESS

1. Background. Reference (f) created the DDA process including the procedures used to request disposition instructions for excess, obsolete, unserviceable, and WMM.

2. Disposition Process. The Marine Corps DDA is located at MARCORSSYSCOM, PM Ammunition. Specific information regarding the military munitions disposition process for Class V(W) munitions is found in reference (1). The military munitions disposition process includes a request for disposition instruction and a subsequent instruction from the appropriate DDA. DDA instructions may be accompanied by shipping instructions from PM Ammunition inventory managers. DDA instructions that allow training will be sent to the appropriate ammunition supply point and training unit. DDA instructions that address Condition Code

(V) WMM will be sent to the ammunition supply point and installation Environmental Department.

3. Disposition of Munitions at MRS. The Marine Corps DDA does not provide disposition instructions for UXO, DMM or munitions constituents being managed at MRS. Management of these type items is governed by the process per reference (m) and agreements typically made between installation environmental managers, Naval Facilities, and state regulators. Agreements regarding appropriate waste determinations and management processes should be documented in statements of work, work plans, and other appropriate MRP documents. Emergency response procedures, roles/responsibilities of EOD, and applicable emergency permits for on-base destruction of military munitions should also be agreed upon by stakeholders and documented.

CHAPTER 21

WASTE MILITARY MUNITIONS AND  
MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVE HAZARD

SECTION 3: RESPONSIBILITIES

21300. CMC (LF)/COMMANDER MCICOM

1. Assist installations in resolving HW military munitions management disputes with Federal, state, and/or local regulatory agencies.
2. Provide environmental expertise for the execution of this chapter (e.g., Subpart X permitting issues, WMM transportation procedures, QRP operations, and overall environmental compliance).

21301. COMMARCORSYSCOM. As the Marine Corps Executive Agent for military munitions life-cycle management and the DDA for Class V(W) military munitions:

1. Develop Marine Corps WMM implementation policy and coordinate that policy with CMC (LF) and CMC (LPE).
2. Provide installations disposition instructions for Class V(W) excess, unserviceable, and obsolete military munitions.
3. Conduct the MR portion of ECEs. Report findings and trends to CMC (LF). Identify explosives safety hazards associated with management of WMM and processing of range residue and other MPPEH.
4. Promote Marine Corps awareness of military munitions resource, recovery, and recycling (R3) methods. Coordinate with CMC (LF) to distribute R3 information to installations.
5. Implement HW military munitions management training programs and train personnel involved with HW military munitions and MPPEH management.

21302. CG/CO OF MARINE CORPS INSTALLATION AND COMMARFORRES

1. Identify, evaluate, and comply with applicable Federal, state, and local HW military munitions management requirements or applicable country-specific FGS.
2. Designate, in writing, an individual responsible for managing the HW military munitions component of the installation HW management program and coordinating with other DOD and regulatory organizations.
3. Include HW military munitions in the installation's HW Management Plan and contingency plan.
4. Designate personnel technically qualified to certify and verify MPPEH as MDAH and MDAS.
5. Ensure all MPPEH is certified and verified as MDAS before their release to the public.

6. Forward recommendations for improving HW military munitions policy to CMC (LF) and COMMARCORSYSCOM.
7. Program and budget for services, personnel, facilities, and equipment necessary to comply with applicable Federal, state, and local HW military munitions management requirements or applicable country-specific FGS.
8. Assist tenants and contractors in developing their HW military munitions management programs and processes for managing MPPEH.
9. Coordinate HW military munitions and MPPEH management among EOD, Range Control, environmental, explosives safety, and ammunition management personnel.
10. With participation from installation tenants, modify installation orders, instructions, plans, and SOPs to comply with this chapter.

21303. MARINE CORPS RECS

1. Coordinate, both within the region and with Headquarters Marine Corps, significant regional installation WMM management issues.
2. Assist installation environmental office personnel with developing and implementing MOU/MOA for explosives or munitions emergency response.

21304. CG/CO OF TENANT COMMANDS/UNITS

1. Participate in the updating of host installation's HW military munitions and MPPEH management documents.
2. Develop tenant command/unit orders and/or instructions necessary to implement the host installation's HW military munitions and MPPEH management program.
3. Designate, in writing, HW military munitions management personnel responsible for coordinating command/unit HW military munitions compliance matters with the host installation.
4. Comply with applicable Federal, state, and local HW military munitions management requirements or applicable country-specific FGS.
5. Assist the host installation in completing regulatory reports involving HW military munitions.
6. Program and budget for services, personnel, facilities, and equipment necessary to comply with applicable Federal, state, and local HW military munitions and MPPEH management requirements or applicable country-specific FGS.

REFERENCES

- (a) 40 CFR 264.1200
- (b) 40 CFR 265.1200
- (c) 40 CFR 261
- (d) 40 CFR 266
- (e) DOD Instruction 4140.62, "Material Potentially Presenting an Explosive Hazard," November 25, 2008
- (f) Department of Defense Policy to Implement the EPA's Military Munitions Rule, July 1, 1998
- (g) 40 CFR 260
- (h) 40 CFR 265
- (i) 40 CFR 270
- (j) Department of Defense Explosives Safety Board Technical Paper 18, December 20, 2004
- (k) SECNAV M5210.1
- (l) MCO P8020.10B
- (m) 42 U.S.C 9601 et seq.

APPENDIX A

OVERSEAS ENVIRONMENTAL COMPLIANCE

A. SCOPE. This chapter provides environmental guidance for Marine Corps installations outside the United States, its territories, possessions or commonwealths, excluding operations, training deployments, or the operations of military vessels and aircraft outside the United States.

B. TERMS AND DEFINITIONS

1. Environment. The navigable waters, waters of the contiguous zone, ocean waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface area, or ambient air within the United States or under the jurisdiction of the United States, including man-made structures, indoor air environments, and archaeological and cultural resources.

2. FGS. Country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or specific management practices with which installations must comply. Reference (b) are derived from reference (c), host nation substantive pollution control laws of general applicability, applicable treaties and United States law with extraterritorial application.

3. Foreign Nation. Any geographic area (e.g., land, water, and airspace) that is under the jurisdiction of one or more foreign government(s), any area that is under military occupation by the United States alone or jointly with any other foreign government, and any area that is the responsibility of an international organization of governments. The term, "Foreign Nation," includes contiguous zones and fisheries zones of foreign nations. The term, "Foreign Government," includes governments (regardless of whether they are recognized by the United States), political factions, and organizations that exercise governmental power outside the United States.

4. Installation. Facility directly owned and operated by and/or for the Marine Corps (or other DOD service) that shelters military equipment and personnel, and facilitates training and operations. This includes any leased facility where Marine Corps activities have real property maintenance requirements. Military departments or DOD activities that are located within the confines of another installation and occupying portions of the land, buildings, structures of the main installation are considered to be tenants. Overseas installations are defined as permanent, base force structure facilities under the operational control of the Secretary of a military department or the DOD that is located outside the United States and outside any territory, commonwealth or possession of the United States. Installations overseas do NOT include temporary, contingency operation or deployment support facilities.

5. Overseas Environmental Baseline Guidance Document (OEBGD). Reference (c) is a current compendium of criteria, based on consideration of laws generally applicable to similarly situated DOD installations within the United States, that is designated to protect the environment at DOD installations outside United States territory.

6. SOFAs. Agreements concerning the stationing or operation of forces in a host country. These actions include multilateral or bilateral stationing for operating and base rights agreements.

7. United States. All states, territories, and possessions of the United States and all waters and airspace subject to the territorial jurisdiction of the United States.

C. POLICY

1. General Policy for Marine Corps Overseas Installations. Reference (a) implements policy, assigns responsibilities, and prescribes procedures establishing environmental compliance standards for protection of human health and the environment at DOD installations in foreign countries. In foreign nations where there is a reference (b), all Marine Corps installations and operations shall comply with reference (b). Where reference (b) have not been issued, Marine Corps installations will comply with reference (c), host nation substantive pollution control laws of general applicability (as required by reference (d)), and applicable treaties (including SOFAs and bilateral agreements). Overseas installations must comply with any United States law with extraterritorial effect. In addition, unless otherwise indicated, the policies contained in this Manual apply to Marine Corps activities overseas.

2. Environmental Management Program. All EMS appropriate overseas installations must adhere to the current Marine Corps policy and responsibilities for effective environmental program management through maintenance of the Marine Corps EMS as outlined in chapter 2 of this Manual. EMS requirements also apply to Regional activities with EMS oversight, reporting, and support responsibilities. All commands and tenant organizations operating on Marine Corps installations or other host facilities are stakeholders in their installation or host facility EMS and must exercise their authorities to continually improve their environmental performance by preventing and controlling the potential environmental impacts of their operations.

3. Funding. Marine Corps installations shall comply with the policy and responsibilities for funding environmental compliance and protection outlined in chapter 3 of this Manual.

4. ECEs. Overseas Marine Corps overseas installations shall use environmental audit checklists developed from reference (b). Where reference (b) not been issued, the installation shall use reference (c), chapter 4 of this Manual, and reference (e) to develop an appropriate program.

5. Training. Marine Corps installations shall comply with the training measures developed from reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c) and chapter 5 of this Manual to develop an appropriate program.

6. Air Quality Management

a. Air Quality. Marine Corps actions in foreign countries are not

subject to the requirements of reference (f). Marine Corps overseas installations shall manage their air programs under reference (b). In addition, installations shall encourage the use of unleaded fuels. Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 6 of this Manual, and reference (e) to develop an appropriate program.

b. ODS. Marine Corps overseas installations shall manage their ODS as directed in chapter 6 of this Manual and reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 6 of this Manual, and reference (e) to develop an appropriate program. Manifests documenting the proper disposal of ODS should be available at installations.

c. Radon. Marine Corps installations shall manage their radon program in accordance with the NAVRAMP as outlined in chapter 6 of this Manual and reference (e).

d. Asbestos. Marine Corps installations shall manage their asbestos programs under reference (b). Where reference (b) have not been issued, the installation shall comply with chapter 6 of this Manual to develop an appropriate program. Asbestos management plans must meet all of the necessary requirements of reference (b).

#### 7. Emergency Planning and Response

a. Reference (g) directs all Federal agencies to comply with reference (h). Reference (g) applies to Federal facilities in any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. As a matter of policy, Marine Corps installations outside of these areas are encouraged to make best efforts to comply with the goals of this order. Communication and coordination between various emergency response organizations (e.g., fire department, Environmental Affairs Branch, and Provost Marshall's Office) is strongly encouraged.

b. Oil and Hazardous Substances (OHS) Spills and Contingency Planning. Marine Corps overseas installations manage OHS spills and contingency planning under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 7 of this Manual, and reference (e) to develop an appropriate program. Marine Corps overseas installations shall implement the requirements of chapter 7 of this Manual regarding internal reporting and drills and exercises. Field Training and Environmental Management Plans for all training being conducted on the camp or in any training areas must be developed and submitted in accordance with reference (i) for all Marine Corp Bases Japan (MCBJ), with the exception of MCAS Iwakuni. Site Specific Spill Plans (SSSPs) must include cleanup procedures for spilled pesticides and SSSP maps must include all required elements per reference (i). In addition to POLs, Spill Prevention, Control and Countermeasures (SPCC) Plans must address applicable hazardous substances, as required in reference (b).

8. Cultural Resources Management. Marine Corps overseas installations shall ensure compliance with the requirements for protecting historic and archeological resources of reference (b). The policies outlined in chapter 8 of this Manual apply to overseas locations as well; exceptions are identified as necessary throughout this chapter. Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 8 of this Manual, and reference (e) to develop an appropriate program. Marine Corps overseas installations must receive permission from the Office of the Deputy Under Secretary of Defense for the management and preservation of artifacts. To ensure protection of cultural resources that otherwise might be exploited, cultural resources location information in the installation GIS should be restricted/protected. The ICRMP shall be shared, when practicable and upon approval from the installation Public Affairs Office, for the purposes of communication, with external stakeholders in accordance with references (b) and chapter 8 of this Manual.

9. HW Management. Marine Corps overseas installations shall manage their HW under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 9 of this Manual, and reference (e) to develop an appropriate program.

a. References (b) and (c) require all Marine Corps installations to develop Hazardous Waste Management Plans (HWMPs) that describes the HW management procedures implemented at the installation. All HW stored on-site must meet storage requirements and must be inspected periodically and inspection records retained per reference (j), SSIC 5090.2. Installations must track all HW shipped offsite by the installation to the point of final disposition using authorized manifests, and must maintain records per reference (j), SSIC 5090.2a and 2c. Installations must also ensure that all personnel responsible for handling, packaging, or shipping HW are trained appropriately.

b. Marine Corps installations shall use the requirements of chapter 9 of this Manual and reference (b) regarding HWMPs. Training, inspections, and cradle-to-grave tracking of HW and non-regulated waste must be followed in accordance with reference (b). All HM must be listed on the AUL for the unit. Proper Hazardous Chemical Warning Labels are required.

10. Natural Resources Management. Marine Corps installations shall program and budget for compliance and ensure compliance with reference (b) and reference (k) for those actions which may have a significant impact. Proponents of proposed actions must budget for and fund environmental reviews and studies under references (k). The policies outlined in chapter 11 of this Manual apply to overseas locations as well; exceptions are identified as necessary throughout this chapter. Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 11 of this Manual, and reference (e) and other applicable US Forces Japan agreements regarding threatened and endangered species (T&E)) to develop an appropriate program. To ensure protection of cultural resources that otherwise might be exploited, T&E species location information in the installation GIS should be restricted/protected. The INRMPs shall be shared, when practicable and upon approval from the installation Public Affairs Office, for the purposes of communication, with external stakeholders in accordance with reference (b)

and chapter 11 of this Manual.

11. NEPA. Marine Corps actions in foreign countries are not subject to the requirements of reference (l); however, certain Marine Corps actions are subject to references (k), (m), and (n) concerning environmental effects abroad of major DOD actions, as well as reference (b). Overseas installations must comply with these requirements. The requirements outlined in chapter 12 of this Manual are specific to reference (l); while they do not explicitly apply to Marine Corps actions abroad, they can be viewed as BMPs for compliance with the requirements of references (k) and (m). All environmental reviews and studies will not be funded by the Environmental Office, in accordance with chapters 3 and 12 of this Manual. The proponent of the proposed action must fund environmental reviews and studies under the references (k) and (m).

12. Noise Management. Marine Corps overseas installations shall ensure compliance with the noise abatement measures of reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 13 of this Manual, and reference (e) to develop an appropriate program.

13. Pesticide Compliance. Marine Corps overseas installations shall manage their pesticides under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 14 of this Manual, and reference (e) to develop an appropriate program. Installations that are responsible for pesticide application shall develop IPMPs and ensure that the program addresses pesticide applicator certification and recertification training, pesticide storage, handling and disposal practices, and pest management operations, record-keeping, and reporting.

14. P2

a. References (g) and (o) direct all Federal agencies to implement within the agency sustainable practices for pollution and waste prevention and recycling. These E.O.s apply to Federal facilities in the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. As a matter of policy, Marine Corps installations outside of these areas are encouraged to make best efforts to comply with the goals of these orders.

b. Marine Corps installations shall prepare, maintain, and update P2 plans; plan, program, budget, and allocate funds for P2 projects; consider the life-cycle costs of implementing a project; establish and operate recycling and composting programs; provide P2 training; and implement a HCP as outlined in chapter 15 of this Manual. Overseas installations shall ensure that all requirements pertaining to the labeling and proper storage of HMs are met.

15. Drinking Water Systems and Water Conservation. Marine Corps overseas installations shall manage their drinking water under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 16 of this Manual, and reference (e) to develop an

appropriate program. Potable Water Master Plans must be maintained per reference (j), SSIC 5090.4 and updated at least every five years. Overseas installations shall monitor for lead in priority areas as specified in paragraph 16201.2c of this Manual. Marine Corps overseas installations are not subject to DOD or Marine Corps perchlorate sampling and reporting requirements. All overseas water systems serving greater than 25 DOD consumers shall develop a Water System Vulnerability Assessment and Emergency Response Plan (ERP) update (if required) for internal use only. All drinking water treatment/distribution system operators shall be trained per reference (b), using the basic training elements that are specified in paragraphs 16212.1 and 16212.2 of this Manual.

16. Solid Waste (SW) Management and Resource Recovery. Marine Corps overseas installations shall ensure compliance with SW standards under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 17 of this Manual and reference (e) to develop an appropriate program. A base order shall be published, implementing local solid waste management and resource recovery. Trash containers, with appropriate lids, shall be provided at solid waste accumulation points. Environmentally sound practices shall be used with respect to the disposal of electronic equipment that has reached the end of its useful life, in accordance with reference (b). Sharp containers and biohazard receptacles shall be labeled in both English and Japanese as required.

17. USTs. Marine Corps overseas installations shall manage USTs under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 18 of this Manual, and reference (e) to develop an appropriate program. Marine Corps overseas installations shall develop and implement Tank Management Plans. USTs shall meet engineering standards for petroleum-oil-lubricant storage and adequate policy and procedures shall be put in place to ensure compliance, in accordance with reference (b). Comprehensive management programs shall be implemented for inspection, leak reporting, and preventative maintenance of the USTs. Personnel shall be trained to calibrate the monitoring systems that are in place.

18. PCB Management. Marine Corps installations shall manage their PCBs under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 19 of this Manual, and reference (e) to develop an appropriate program. As part of the program, overseas installations shall develop a PCB Elimination Plan that describes the installation's planned actions and timeframes to eliminate PCBs and PCB items. PCB transformers remaining in service and PCB storage facilities must be included in the SPCC plan or SSSPs. MCBJ PCB Program roles and responsibilities should be clearly defined for the PCB Elimination Plan.

19. WQM. Marine Corps installations shall manage their water programs under reference (b). Where reference (b) have not been issued, the installation shall comply with reference (c), chapter 20 of this Manual and reference (e) to develop an appropriate program.

20. WMM

Marine Corps overseas installations shall manage their WMM as directed in chapter 21 of this Manual, with certain exceptions. Marine Corps overseas installations shall manage their MPPEH hazard in accordance with the requirements of reference (p).

The following paragraphs under chapter 21 do not apply to overseas installations:

- a. 21102.1
- b. 21103
- c. 21104.4(a) and (b)
- d. 21104.5 (a) and (b)
- e. 21204

D. RESPONSIBILITIES

1. CMC (LF)

a. Ensure Budget Submitting Offices (BSOs) allocate the resources required to achieve and maintain compliance with reference (c) and/or (b).

b. Provide policy needed to establish and maintain a program for the management of environmental concerns overseas.

2. REGIONAL COMMANDERS

a. Perform the functions required by reference (a).

b. Perform the functions required by reference (a) and serve as LEA when so designated.

3. CG/CO OF OVERSEAS MARINE CORPS INSTALLATIONS

a. Comply with reference (c) and/or (b).

b. Develop and conduct training/education programs to instruct required personnel in the environmental aspects of their job.

c. Perform and document installation self ECEs annually. The purpose of the self ECE is to determine the overall compliance assessment status of the installation.

d. Communicate following the Marine Corps chain-of-command with the CG of the Marine Corps Regional Command if present or the LEC on environmental issues.

4. UNIT/TENANT COMMANDERS

a. Ensure compliance with reference (c) and/or (b).

b. Conduct environmental quality assessments at overseas installations in accordance with reference (c) and/or (b).

c. Program and budget for environmental compliance projects.

d. Ensure that contracts for services or construction, where performance takes place at an overseas activity, and DOD contracts for the disposal of HW, include provisions requiring a contractor to comply with reference (c) and/or (b). The BSO shall also ensure that contracts are administered to enforce such compliance.

e. Ensure host-tenant agreements address compliance with reference (c) and/or (b).

f. Communicate with Lead Environmental Components on environmental issues.

g. Endorse activity waiver requests from reference (c) and/or (b).

REFERENCES

- (a) DOD Instruction 4715.5, "Management of Environmental Compliance at Overseas Installations," April 22, 1996  
(<http://www.dtic.mil/whs/directives/>)
- (b) FGS as developed by Lead Environmental Components for each country with significant DOD installations  
(<https://www.denix.osd.mil/denix/DOD/Library/Intl/FGS/final-gov-stds-DOD.html>)
- (c) DOD Publication 4715.05-G, "DOD Overseas Environmental Baseline Guidance Document," May 1, 2007 (<https://www.dtic.mil/whs/directives/corres/publ.html>)
- (d) Executive Order 12088, "Federal Compliance with Pollution Control Standards," 13 October 1978
- (e) United States Marine Corps, "Environmental Compliance Evaluation (ECE) Assistance Guide," May 2011
- (f) 42 U.S.C. 7401 *et seq.*
- (g) Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 24, 2007
- (h) 42 U.S.C. 11001 *et seq.*
- (i) MCBO 5090.2, "Spill Prevention and Response Plan (SPRP) Environmental Management System Procedures (EMSP) 11.1"
- (j) SECNAV M-5210.1
- (k) Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions," January 4, 1979
- (l) 42 U.S.C. 4321-4347
- (m) DOD Directive 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," March 31, 1979
- (n) SECNAVINST 5090.6A
- (o) Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," October 5, 2009
- (p) NAVSEA OP 5, Volume 1, Seventh Revision, Change 8 "Ammunition and Explosives Safety Ashore," July 1, 2009

APPENDIX B

FEDERAL ENVIRONMENTAL STATUTES, REGULATIONS,  
E.O.s, AND MILITARY MANDATES

A. FEDERAL STATUTES

1. Alternative Motor Fuel Act of 1988, as Amended (Public Law 100-494).

This Act was enacted by Congress to achieve long-term energy security and to improve air quality by encouraging the production of AFVs. The Act requires a portion of the new vehicles that the Federal Government acquires each year to be AFVs.

2. American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996). This Act states the policy of the United States to protect and preserve for Native Americans their inherent rights of freedom to believe, express, and exercise the traditional religions of Native Americans, Eskimos, Aleuts, and Native Hawaiians. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremony and traditional rites.

3. Antiquities Act of 1906 (16 U.S.C. 431-433). This Act provides for the protection of historic and prehistoric ruins and objects of antiquity on Federal lands and for the authorized scientific investigation of antiquities on Federal lands, subject to permits and other regulatory requirements.

4. Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469 et seq.). This Act directs Federal agencies to notify the Secretary of the Interior when any Federal construction project of a Federally licensed activity or program may cause irreparable loss or destruction of significant scientific, prehistoric, historic, or archaeological data. The Act also provides a mechanism for funding the protection of historic and archaeological data.

5. Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S.C. 470(aa) et seq.). This Act prohibits the removal, sale, receipt, and interstate transportation of archaeological resources obtained illegally (without permits) from public or Native American lands and authorizes agency permit procedures for investigations of archaeological resources on public lands under the agency's control. Public Law 100-555 amended the ARPA to require the Secretaries of the Interior, Agriculture, and Defense 1) to develop plans for surveying the lands under their control to determine the nature and extent of archaeological resources, and 2) to prepare a schedule for surveying those lands that are likely to contain the most scientifically valuable archaeological resources.

6. Atomic Energy Act (AEA) of 1954, as Amended (42 U.S.C. 2011 et seq.).

This Act amended the AEA of 1946, which had placed complete power for atomic energy development in the hands of the Atomic Energy Commission. The Act was passed to promote the peaceful uses of nuclear energy through private enterprise and to implement President Eisenhower's Atoms for Peace Program. The Act allowed the Atomic Energy Commission to license private companies to use nuclear materials and to build and operate nuclear power plants. The

purpose of the Act is to assure the proper management of source, special nuclear, and byproduct material. The AEA and amendments delegate the control of nuclear energy primarily to the DOE, the Nuclear Regulatory Commission, and the EPA.

7. Bald Eagle Protection Act of 1940, as Amended (16 U.S.C. 668 et seq.). This Act, amended in 1972, prohibits the killing, harassment, possession, or selling of bald eagles. The Act also imposes penalties for the possession of bald eagles or eagle parts taken from birds after June 1940. The Act provides an exemption for the use of bald eagle parts in Native American religious ceremonies, provided that the appropriate permit is granted to the tribe by the USFWS.

8. Base Closure and Realignment Act (BRAC) of 1988 (Public Law 100-526). This Act, as amended in 1990 (PL 101-510), was enacted by Congress to select bases for realignment and closure as a part of overall military downsizing. The Act contains provisions which provide for the BRAC Environmental Restoration Program. This program ensures that the property is not released for public use until all HW has been removed from the property. Ultimately, this cleanup process may prevent the transfer of cleaned parcels of land in the otherwise required six-year time frame. However, the Act does not prevent the Marine Corps from initiating and executing lease agreements with interested parties before cleanup is complete.

9. CAA of 1970, as Amended (42 U.S.C. 7401 et seq.). This Act, the major Federal legislation concerning the control of the Nation's air quality, requires the setting of NAAQS and the development of Federal and state programs to achieve these standards through the control of air pollution sources. The Act also provides for the EPA's delegation of authority to states to conduct air pollution control programs. The 1990 amendments (Public Law 101-549) stress pollution control and prevention.

10. CWA of 1977, as Amended (Public Law 95-217, 33 U.S.C. 1251 et seq.). This Act is a compilation of decades of Federal water pollution control legislation. The Act amended the FWPCA and requires Federal agency consistency with state nonpoint source pollution abatement plans. The CWA is the major Federal legislation concerning improvement of the Nation's water resources. The Act was amended in 1987 to strengthen enforcement mechanisms and to regulate stormwater runoff. The Act provides for the development of municipal and industrial wastewater treatment standards and a permitting system to control wastewater discharges to surface waters. The CWA contains specific provisions for the regulation of dredge soil disposal within navigable waters and for the placement of material into wetlands. Permits are required under sections 401, 402, and 404 for proposed actions which involve wastewater discharges and/or dredging/placement of fill in wetlands or navigable waters. These permits are required prior to the initiation of proposed actions. Certain proposed actions may implicate state review and water quality certification jurisdiction under section 401 of the Act, resulting in the imposition of conditions designed to ensure consistency with state water quality standards.

11. CZMA of 1972 (16 U.S.C. 1451 et seq.). This Act provides incentives for coastal states to develop and implement coastal area management programs.

The Act plays a significant role in water pollution abatement, particularly with regard to nonpoint source pollution. State coastal zone management programs frequently incorporate flood control, sediment control, grading control, and stormwater runoff control statutes. Under the CZMA, Federal actions that have a direct impact on the coastal zone must be consistent to the maximum extent practicable with the state program. These state statutes must be considered when addressing the water pollution impacts of Marine Corps projects.

12. CERFA of 1992 (Public Law 102-426). This Act amended the CERCLA, section 120(h), Property Transferred by Federal agencies. CERFA requires the Federal Government, before the termination of Federal activities on any real property owned by the government, to identify real property where no HS or petroleum was stored, released, or disposed of. CERFA further clarifies "remedial action taken" in CERCLA section 120(h)(3).

13. CERCLA of 1980, as Amended (42 U.S.C. 9601 et seq.). This Act was enacted to deal with health and environmental hazards caused by past HW management practices. As amended by the SARA, the Act requires the EPA to promulgate revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (the National Contingency Plan (NCP)). The NCP establishes the process for determining appropriate removal and remedial action for the Nation's most serious Superfund HW sites. Additionally, the NCP establishes the national framework for planning and response to oil discharges and HS releases. The NCP assigns responsibilities for contingency planning and response to various Federal agencies, including the DOD, and outlines state and local government and public and private interest group participation in these areas. The NCP also specifies notification procedures for certain oil discharges and HS releases.

14. Conservation Programs on Military Reservation (Sikes Act) of 1960, as Amended (16 U.S.C. 670(a) et seq.). This Act requires each military department 1) to manage natural resources and to ensure that necessary services are provided for the management of fish and wildlife resources on each installation, 2) to provide their personnel with professional training in fish and wildlife management, and 3) to give priority to contracting work with Federal and state agencies that have responsibility for the conservation or management of fish and wildlife. The Act authorizes cooperative agreements with state and local governments, nongovernmental organizations, and individuals that call for each party to provide matching funds or services to carry out natural resources projects and initiatives.

15. EPCRA of 1986 (42 U.S.C. 11001 et seq.). Also known as SARA, Title III, this Act focuses on the hazards associated with toxic chemical releases. Most notably, specific sections of EPCRA require the immediate notification of releases of extremely HS and CERCLA-defined HS to state and local emergency response planners. EPCRA requires state and local coordination in planning response actions to chemical emergencies. The Act also requires certain industries to submit information on chemical inventories and fugitive emissions.

16. ESA of 1973 (16 U.S.C. 1531 et seq.). This Act determines and protects both plant/animal species and their critical habitats that are threatened or

endangered. The Act prohibits any Federal action that may jeopardize such species and provides for the designation of critical habitat of such species wherein no action is to be taken concerning degradation of the habitat. The Act requires a biological assessment of Federal agency actions when an endangered or threatened species may be present in the area affected by the actions.

17. EPACT of 1992 (Public Law 102-486). This Act seeks to reduce the Nation's dependency on imported oil and to improve energy efficiency. It includes provisions on government purchases of AFVs, electricity, and global warming research. The Act promotes energy efficiency and renewable energy and uses a mixture of voluntary and mandatory measures, requiring new efficiency standards for appliances that use energy and water.

18. Energy Policy and Conservation Act of 1975, as Amended (42 U.S.C. 6201 et seq.). This Act increases the supply of petroleum reserves, while concurrently lowering the demand for those products. The Act provides for the creation of a Strategic Petroleum Reserve, the implementation of price incentives to increase the supply of fossil fuels, the regulation of certain energy uses, and the reduction in demand for petroleum products through programs designed to promote the use of coal. The Act also provides for the increased energy efficiency of automobiles, major appliances, and other consumer products, as well as the conservation of water via efficiency improvements in plumbing.

19. Federal Facilities Compliance Act of 1992 (Public Law 102-386). This Act amends the SWDA to waive governmental immunity, subject Federal agencies to civil and administrative penalties, and require payment of any nondiscriminatory charges that are assessed in connection with a Federal, state, or local solid waste (SW) or HW regulatory program. The Act also provides FOTWs with the same sewage exclusion from HW regulation as afforded to POTWs.

20. FIFRA of 1947, as Amended (Public Law 92-516, 7 U.S.C. 136 et seq.). This Act provides the principal means for preventing environmental pollution from pesticides through product registration and applicator certification. The Act requires that all pesticide products registered by the EPA must have label instructions for use, storage, and disposal on each container (label instructions are legally applicable to all users). Under FIFRA, the EPA is required to accept certain pesticides under recall for safe disposal. It is unlawful to purchase, distribute, or use any pesticide that does not have an EPA registration number or for which registration has been canceled or suspended, or to apply, store, or dispose of any pesticide or container in any manner inconsistent with applicable regulations. The Act was amended in 1972 by the Federal Environment Pesticide Control Act, and subsequently in 1975 and 1978.

21. Federal Noxious Weed Act of 1974 (7 U.S.C. 2801 et seq.). This Act provides for the control and eradication of noxious weeds and their regulation in interstate and foreign commerce. The Act requires a general or specific permit from the Secretary of Agriculture for the movement of noxious weeds identified in the regulation into or through the United States unless such movement is from Canada.

22. FPAS Act of 1949 (10 U.S.C. 484 et seq.). This Act contains provisions on the sale of recyclable materials.
23. Federal Tort Claims Act of 1946, as Amended (28 U.S.C. 2671 et seq.). This Act substitutes the United States as the party defendant in cases alleging negligent action by a Federal employee or service member.
24. FWPCA of 1972, as Amended (33 U.S.C. 1251 et seq.). As the precursor to the CWA, this Act contains virtually all the same tools and enforcement mechanisms that the CWA contains. The CWA amendments of the FWPCA in 1977 redefined the contaminants of concern, which had previously been oxygen-demanding materials. The FWPCA is usually referred to as the CWA.
25. FWCA of 1980 (16 U.S.C. 2901 et seq.). This Act promotes state programs for the purpose of conserving, restoring, or otherwise benefiting nongame fish and wildlife, and their habitat.
26. Forest and Rangeland Renewable Resource Planning Act of 1974 (16 U.S.C. 1600-1614). Imposes requirements designed to ensure the effective management, use, and protection of the National Forest System.
27. FOIA of 1966, as Amended (5 U.S.C. 552). This Act provides the mechanisms and procedures by which Federal agency information is distributed to the public.
28. HSWA of 1984 (Public Law 98-616). See SWDA.
29. HMTA of 1975 (49 U.S.C. 5101 et seq.). This Act regulates the shipping, marking, labeling, placarding, and recordkeeping requirements for HM, including HW and military munitions. The Act applies to the transportation of HM by rail car, aircraft, vessels, interstate, and foreign carriers by motor vehicle. Substances covered by the Act are HW, HS, flammable cryogenic liquids in portable tanks and cargo tanks, and marine pollutants. The Act is administered by the DOT.
30. Hazardous Materials Transportation Uniform Safety Act (HMTUSA) of 1990 (Public Law 101-615). This Act clarifies the maze of conflicting Federal, state, and local regulations relating to the transportation of HM. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of HM in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. The Act includes provisions to encourage uniformity among different state and local highway-routing regulations, to develop criteria for the issuance of Federal permits to motor carriers of HM, and to regulate the transport of radioactive materials.
31. Historic Sites, Buildings, and Antiquities Act of 1935 (Public Law 74-292, 16 U.S.C. 461 et seq.). This Act lists national historic sites and sets forth Federal policy to preserve historic and prehistoric properties of national significance. The Act enables the Secretary of the Interior to protect nationally significant historic resources and includes the authority to establish and acquire nationally significant sites.

32. Low-Level Radioactive Waste Policy Act of 1980, as Amended (42 U.S.C. 2021b et seq.). This Act mandates that radioactive waste be disposed of in the state, or the associated compact, where it is generated. The Act also transfers the responsibility for the storage and disposal of low-level radioactive waste from the Federal Government to the states or compacts, excepting several cases in which the Federal Government is responsible for the generation of regulated wastes.

33. Magnuson Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801 et seq.). This Act halts overfishing by foreign fleets and aids the development of the domestic fishing industry. The Act gives the United States sole management authority over living resources within its jurisdictional waters.

34. MMPA of 1972, as Amended (16 U.S.C. 1361 et seq.). This Act protects marine mammals and establishes a marine mammal commission.

35. MPRSA of 1972, as Amended (33 U.S.C. 1401 et seq. and 16 U.S.C. 1431 et seq.). This Act, also known as the Ocean Dumping Act, protects oceanic waters from dumping. The Act provides for the establishment of procedures for regulating the transportation of materials into the oceans for the purpose of dumping. The Act prohibits the dumping of sewage sludge after December 31, 1991.

36. MBTA of 1918, as Amended, (16 U.S.C. 703 et seq.). This Act prohibits taking or harming a migratory bird, its eggs, nests, or young without the appropriate permit.

37. Military Construction Authorization Act, Passed Annually. This Act is an annual update of military construction projects.

38. Military Construction Codification Act of 1982 (Public Law 97-214). This Act provides guidance for the sale of certain recyclable materials.

39. Military Reservation and Facilities: Hunting, Fishing, and Trapping Act of 1958 (Public Law 85-337, 10 U.S.C. 2671). This Act requires that all hunting, fishing, and trapping activities on military installations be conducted in accordance with the state fish and game laws in which the installation is located. Appropriate state licenses must be obtained for these activities on the installation.

40. National Energy Conservation Policy Act of 1978 (Public Law 95-619). This Act promulgates conservation measures and efficiency standards to control the growth rate of energy demands.

41. NEPA of 1969 (42 U.S.C. 4321 et seq.). This Act ensures that environmental factors are given the same consideration as other factors in decision making by Federal agencies. Through the EIS requirements, NEPA mandates that all Federal agencies consider the environmental effects of, and any alternatives to, all proposals for major Federal actions that significantly affect the quality of the human environment. The Act also established the CEQ in the Executive Office of the President.

42. NHPA of 1966 (16 U.S.C. 470 et seq.). This Act provides for the nomination, identification (through listing on the NRHP), and protection of historical and cultural properties of significance. The Act establishes specific procedures for compliance, including initial review authority by the cognizant State Historic Protection Officer.

43. Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq.). This Act requires Federal agencies to establish procedures for identifying Native American groups associated with cultural items on Federal lands, to inventory human remains and funerary objects in Federal possession, and to return such items upon request to affiliated groups. The Act also requires that any discoveries of cultural items covered by this statute must be reported to the head of the cognizant Federal entity, who will notify the appropriate Native American tribe or organization and cease activity in the area of discovery for at least 30 days.

44. Noise Control Act of 1972 (42 U.S.C. 4901 et seq.). This Act authorizes the establishment of Federal noise emissions standards for products distributed in commerce and coordinates Federal research efforts in noise control.

45. Noxious Plant Control Act of 1968 (43 U.S.C. 1241 et seq.). This Act requires the head of Federal departments and agencies to allow a state having a program for the control of noxious plants to enter upon any Federal lands, for the purpose of controlling noxious plants, if certain criteria are met.

46. Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.). This Act ensures safe and healthful working conditions by authorizing the enforcement of the standards developed under the Act; by assisting and encouraging the states in their efforts to ensure safe and healthful conditions; and by providing for research, information, education, and training in the field of occupational safety and health.

47. OPA of 1990 (Public Law 101-380, 33 U.S.C. 2702 et seq.). This Act prohibits the harmful discharges of oil and HS into waters of the United States or discharges which may affect natural resources owned or managed by the United States. The Act amended section 311 of the CWA to augment Federal response authority, increase penalties for oil spills, expand the organizational structure of the Federal response framework, and provide an emphasis on preparedness and response activities.

48. Outdoor Recreation - Federal/State Program Act (16 U.S.C. 460(L) et seq.). This Act requires consultation with the National Park Service regarding management for outdoor recreation.

49. PPA of 1990 (42 U.S.C. 13101 et seq.). This Act establishes the national policy that pollution should be prevented at the source whenever feasible. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible, pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible, and disposal or other release into the environment should be employed only pursuant to a permit and only as a last resort and should be conducted in an environmentally safe manner.

50. Public Buildings Cooperative Use Act of 1976 (Public Law 94-541). This Act encourages the adaptive reuse of historic buildings as administrative facilities for Federal agencies or activities.
51. RCRA of 1976, as Amended (42 U.S.C. 6901 et seq.). This Act gives the EPA and delegated states the authority to regulate the generation, transportation, treatment, storage, and disposal of HW ("cradle-to-grave" management). The most significant of the ten subtitles of RCRA is subtitle C, which establishes the national HW management program. The 1986 amendments to RCRA provide the EPA and delegated states with regulatory authority over USTs containing HS and petroleum. RCRA focuses only on active and future facilities. Of particular note is section 3004(u) (i.e., corrective action) by which the EPA or a state may require the cleanup or a schedule for investigation and cleanup of all inactive SWMUs on an installation before issuing a RCRA part B permit for current HW operations at the installation. Note that cleanup standards may be different under RCRA than under CERCLA.
52. Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.). This Act, commonly referred to as the Refuse Act, provides authority to the United States Army Corps of Engineers to issue or deny permits for the construction of dams, dikes, or other structures in or affecting navigable waters of the United States.
53. SDWA of 1974 (42 U.S.C. 300(f) et seq.). This Act amended the Public Health Service Act and specifies a system for the protection of drinking water supplies through the establishment of contaminant limitations and enforcement procedures. The EPA has two kinds of promulgated contaminant limitations: primary drinking water standards to protect public health and secondary drinking water standards to protect public welfare. This Act requires each state to adopt a program to protect wells within its jurisdiction from contamination. States have the primary responsibility to enforce compliance with national primary drinking water standards and sampling, monitoring, and notice requirements. The 1996 amendments (Public Law 104-182) to the SDWA include new regulations based on risk and public health concerns. These regulations include prohibiting the use of lead in plumbing that carries potable water and the listing of unregulated contaminants which pose a health threat or which are known to occur in public water supplies. Additionally, the amendments waive sovereign immunity for Federal facilities.
54. Sikes Act. See Conservation Programs on Military Reservation of 1960.
55. Soil Conservation Act of 1938 (16 U.S.C. 5901 et seq.). This Act provides for the application of soil conservation practices on Federal lands.
56. SWDA of 1965, as Amended (42 U.S.C. 3251 et seq.). The HSWA extended and strengthened the provisions of the SWDA, as amended by RCRA. Subtitle I of HSWA provides for the development and implementation of a comprehensive regulatory program for USTs containing HS, petroleum products, and releases of those substances into the environment. HS regulated under subtitle I include any substance listed in section 101(14) of CERCLA.
57. SARA of 1986 (Public Law 99-499). This Act reauthorized CERCLA to

continue cleanup activities around the country. An \$8.5 million appropriation was authorized for the "Superfund" program. Several site-specific amendments, definitions, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities.

58. TSCA of 1976 (15 U.S.C. 2601 et seq.). This Act provides for the Federal regulation of chemical substances that present a hazard to health or the environment. Such regulation requires the testing of new substances and subsequent control of their commercial distribution. The Act also contains specific requirements relative to PCBs, asbestos, and radon.

59. Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901 et seq.). This Act, which amended the AEA, provides for the custody, remediation, and transfer of lands which are disposal sites for residual radioactive materials, uranium and thorium byproduct materials, and mill tailings. Regulations govern the long-term care and maintenance, monitoring requirements, cleanup standards, and emergency management plans of tailings sites. The Act includes provisions for the use of source material by prime contractors, as well as for the sale or lease of subsurface mineral rights.

60. Used Oil Recycling Act of 1980, as Amended (Public Law 96-463). This Act was enacted to protect and conserve the "scarce" supplies of oil and to protect human health and the environment from the hazards of the improper disposal of used oil. The Act provided for the recycling/reuse of used oil and required the labeling of used oil. Provisions of the Act were incorporated into the HSWA of the SWDA.

61. WQA of 1965 (Public Law 89-234). This Act was the first major legislation pertaining to the water quality standards of surface waters. The Act provides states and interstate compacts with Federal support in the establishment and enforcement of water quality standards. The concepts in the Act are largely superseded by the CWA of 1977.

62. Water Quality Improvement Act of 1970 (Public Law 91-224). This Act prohibits the discharge of "harmful" quantities of oil and sewage from recreational boats into navigable waters. Regulations at 40 CFR 110 define "harmful" quantities as those discharges which will cause a sheen or discoloration on the surface of the water or a sludge or emulsion to be deposited beneath the surface of the water.

#### B. FEDERAL REGULATIONS

1. 15 CFR 930, Federal Consistency with Approved Coastal Management Programs.
2. 15 CFR 902-981, National Oceanic and Atmospheric Administration.
3. 29 CFR 1910, Occupational Safety and Health Standards.
4. 29 CFR 1910.120, Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response.

5. 29 CFR 1910.1200, Hazard Communication Standard.
6. 30 CFR 254, Oil-spill Response Requirements for Facilities Located Seaward of the Coast Line.
7. 32 CFR 172, Disposition of Proceeds from DOD Sales of Surplus Personal Property.
8. 32 CFR 190, Natural Resources Management Program.
9. 32 CFR 775, Procedures for Implementing NEPA.
10. 33 CFR 80, COLREGS DEMARCATION Lines.
11. 33 CFR 153, Control of Pollution by Oil and Hazardous Substances, Discharge Removal.
12. 33 CFR 154, Facilities Transferring Oil or Hazardous Material in Bulk.
13. 33 CFR 320, General Regulatory Policies.
14. 33 CFR 321, Permits for Dams and Dikes in Navigable Waters of the United States.
15. 33 CFR 322, Permits for Structures or Work in, or Affecting, Navigable Waters of the United States.
16. 33 CFR 323, Permits for Discharges of Dredged or Fill Material into Waters of the United States.
17. 33 CFR 324, Permits for Ocean Dumping of Dredged Material.
18. 33 CFR 325, Processing of Department of the Army Permits.
19. 33 CFR 326, Enforcement.
20. 33 CFR 327, Public Hearings.
21. 33 CFR 328, Definition of Waters of the United States.
22. 33 CFR 329, Definition of Navigable Waters of the United States.
23. 33 CFR 330, Nationwide Permit Program.
24. 36 CFR 60, National Register of Historic Places.
25. 36 CFR 800, Protection of Historic Properties.
26. 40 CFR 61, National Emission Standards for Hazardous Air Pollutants.
27. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories.

28. 40 CFR 68, Chemical Accident Prevention Provisions.
29. 40 CFR 70, State Operating Permit Programs.
30. 40 CFR 71, Federal Operating Permit Programs.
31. 40 CFR 109, EPA Regulations on Criteria for State, Local, and Regional Oil Removal Contingency Plans.
32. 40 CFR 110, EPA Regulations on Discharge of Oil.
33. 40 CFR 112, EPA Regulations on Oil Pollution Prevention.
34. 40 CFR 113, EPA Regulations on Liability Limits for Small Onshore Storage Facilities.
35. 40 CFR 116-117, EPA Regulations on Hazardous Substances.
36. 40 CFR 122-124, EPA Regulations Implementing CWA.
37. 40 CFR 125, EPA Regulations on Criteria and Standards for the National Pollutant Discharge Elimination System.
38. 40 CFR 129, EPA Toxic Pollutant Effluent Standards.
39. 40 CFR 130, EPA Requirements for Water Quality Planning and Management.
40. 40 CFR 131, Toxic Criteria for those States not Complying with Clean Water Act, section 303(C)(2)(B).
41. 40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
42. 40 CFR 141-143, EPA National Drinking Water Regulations.
43. 40 CFR 144, Underground Injection Control Program.
44. 40 CFR 145, State Underground Injection Control Program Requirements.
45. 40 CFR 146, Underground Injection Control Program: Criteria and Standards.
46. 40 CFR 147, State Underground Injection Control Programs.
47. 40 CFR 148, Hazardous Waste Injection Restrictions.
48. 40 CFR 149, Sole Source Aquifers.
49. 40 CFR 220-225, Ocean Dumping Regulations and Criteria.
50. 40 CFR 227, Criteria for the Evaluation of Permit Applications for Ocean Dumping of Materials.

51. 40 CFR 228, Criteria for the Management of Disposal Sites for Ocean Dumping.
52. 40 CFR 229, General Permits.
53. 40 CFR 230, Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
54. 40 CFR 232, Section 404 Program Definitions; Exempt Activities not Requiring 404 Permits.
55. 40 CFR 233, Section 404 State Program Regulations.
56. 40 CFR 240-241, EPA Guidelines for the Thermal Processing of Solid Wastes and for the Land Disposal of Solid Wastes.
57. 40 CFR 243, Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste.
58. 40 CFR 244, Solid Waste Management Guidelines for Beverage Containers.
59. 40 CFR 245, EPA Guidelines for Resource Recovery Facilities.
60. 40 CFR 246, Source Separation for Materials Recovery Guidelines.
61. 40 CFR 247, Comprehensive Procurement Guideline for Products Containing Recovered Materials.
62. 40 CFR 257, EPA Regulations on Criteria for Classification of Solid Waste Disposal Facilities and Practices.
63. 40 CFR 258, Criteria for Municipal Solid Waste Landfills.
64. 40 CFR part 261, Identification and Listing of Hazardous Waste.
65. 40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
66. 40 CFR 268, Land Disposal Restrictions.
67. 40 CFR 270, EPA Administered Permit Programs: The Hazardous Waste Permit Program.
68. 40 CFR 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks.
69. 40 CFR 300, EPA National Oil and Hazardous Substances Pollution Contingency Plan.
70. 40 CFR 302, EPA Designation, Reportable Quantities and Notification.
71. 40 CFR 310, Reimbursement to Local Governments for Emergency Response to Hazardous Substances Releases.

72. 40 CFR 355, Emergency Planning and Notification.
73. 40 CFR 370, EPA Hazardous Chemical Reporting: Community Right-to-Know Requirements.
74. 40 CFR 372, Toxic Chemical Release Reporting: Community Right-to-know.
75. 40 CFR 403, General Pretreatment Regulations for Existing and New Sources of Pollution.
76. 40 CFR 405-471, EPA Effluent Guidelines and Standards.
77. 40 CFR 413, Electroplating Point Source Category.
78. 40 CFR 433, Metal Finishing Point Source Category.
79. 40 CFR 503, Standards for the Use or Disposal of Sewage Sludge.
80. 40 CFR 1500, Purpose Policy Mandate (CEQ Regulations on Implementing NEPA Procedures).
81. 40 CFR 1501, NEPA and Agency Planning.
82. 40 CFR 1502, Environmental Impact Statement.
83. 40 CFR 1503, Commenting.
84. 40 CFR 1504, Predecision Referrals to the Council of Proposed Federal Actions Determined to be Environmentally Unsatisfactory.
85. 40 CFR 1505, NEPA and Agency Decision Making.
86. 40 CFR 1506, Other Requirements of NEPA.
87. 40 CFR 1507, Agency Compliance.
88. 40 CFR 1508, Terminology and Index.
89. 43 CFR 11, Natural Resource Damage Assessments.
90. 46 CFR 7, Boundary Lines.
91. 49 CFR 130, Oil Spill Prevention and Response Plans.
92. 49 CFR 171, General Information, Regulations and Definitions.
93. 49 CFR 172, Hazardous Material Table, Special Provisions, Hazardous Material Communications, Emergency Response Information, and Training Requirements.
94. 49 CFR 173, Shippers - General Requirements for Shipments and Packagings.

95. 49 CFR 174, Carriage by Rail.
96. 49 CFR 175, Carriage by Aircraft.
97. 49 CFR 176, Carriage by Vessel.
98. 49 CFR 177, Carriage by Public Highway.
99. 49 CFR 194, Response Plans for Onshore Pipelines.
100. 50 CFR 17, Endangered and Threatened Wildlife and Plants.
101. 50 CFR 18, Marine Mammals.
102. 50 CFR 22, Eagle Permits.
103. 50 CFR Appendix A to Chapter I, Codes for the Representation of Names of Countries.
104. 50 CFR 216, Regulations Governing the Taking and Importing of Marine Mammals.
105. 50 CFR 229, Authorization for Commercial Fisheries Under the Marine Mammal Protection Act of 1972.
106. 50 CFR 402, Interagency Cooperation-Endangered Species Act of 1973, as Amended.

C. E.O.s

1. E.O. 11593, May 13, 1971 (Reprinted as a Note at 16 U.S.C. part 470). This E.O. directs Federal agencies to provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation; to ensure the preservation of cultural resources; to locate, inventory, and nominate to the NRHP all properties under their control that meet the criteria for nomination; and to ensure that cultural resources are not inadvertently damaged, destroyed, or transferred before the completion of inventories and evaluation for the NRHP.
2. E.O. 11644, February 8, 1972 (Reprinted as a Note at 42 U.S.C. 4321). This E.O. controls the use of off-road vehicles on public lands so as to protect the resources of those lands, promote the safety of all users of those lands, and minimize conflicts among the various uses of those lands. The E.O. was amended by E.O. 11989.
3. E.O. 11987, May 24, 1977 (Reprinted as a Note at 42 U.S.C. 4321). This E.O. restricts the introduction of exotic species into the United States.
4. E.O. 11988, May 24, 1977 (Reprinted as a Note at 42 U.S.C. 4321). This E.O. requires Federal agencies to evaluate the effects of their actions on floodplains.
5. E.O. 11989, May 24, 1977 (Reprinted as a Note at 42 U.S.C. 4321). This

E.O. clarifies agency authority to define zones of use by off-road vehicles on public lands and amends E.O. 11644, February 8, 1972, by exempting fire, military, emergency, law enforcement, or combat/combat-support vehicles.

6. E.O. 11990, May 24, 1977 (Reprinted as a Note at 42 U.S.C. 4321). This E.O. directs agencies to take action to protect wetlands on Federal property and mandates the review of proposed actions on wetlands through procedures established by NEPA.

7. E.O. 12088, October 13, 1978 (Reprinted as a Note at 33 U.S.C. 1401 and 42 U.S.C. 4321). This E.O. replaces E.O. 11507 and directs Federal agencies to comply with applicable Federal, state, local, and host nation environmental laws and regulations. The E.O. also requires the head of each Executive agency to ensure that sufficient funds for compliance with applicable pollution control standards are requested in the agency budget. The E.O. requires Federal facility leadership in furthering the purpose and policies of the following statutes: the CAA, FWPCA, SWDA, MPRSA, SDWA, TSCA, NEPA, FIFRA, and the Noise Control Act. E.O. 12088 revoked in part by E.O. 13148 (sections 1-4 revoked).

8. E.O. 12114, January 4, 1979 (Reprinted as a Note at 33 U.S.C. 1401 and 42 U.S.C. 4321). This E.O. directs Federal agencies to take action to further the purpose of the NEPA with respect to the environment outside the United States and its territories and possessions.

9. E.O. 12580, January 23, 1987 (Reprinted as a Note at 42 U.S.C. 9615 and 42 U.S.C. 4321). This E.O. delegates authority to Federal agencies to investigate and respond to HS spills under CERCLA, as amended by SARA.

10. E.O. 12777, October 18, 1991 (Reprinted as a Note at 33 U.S.C. part 1321, 33 U.S.C 2712, and 42 U.S.C. 9615). This E.O. implements section 311 of the FWPCA and the OPA. The E.O. amended E.O. 12580 to implement provisions of the OPA. The E.O. also delegates the President's responsibilities for promulgating regulations pertaining to oil FRPs to the EPA Administrator and to the Coast Guard through the Secretary of the DOT or, in times of war, the Secretary of the DOD.

11. E.O. 12843, April 21, 1993. This E.O. covers the early phase-out of ozone-depleting chemicals.

12. E.O. 12844, April 21, 1993. This E.O. accelerates Federal purchases of AFVs. E.O. 12844 revoked by E.O. 13031.

13. E.O. 12873, October 20, 1993. This E.O. addresses Federal acquisitions, recycling, and waste prevention. The E.O. requires the Federal Government to make more efficient use of natural resources by maximizing recycling and preventing waste wherever possible, in addition to using and procuring environmentally preferable products and services. The E.O. directs Federal agencies to set goals for SW prevention and recycling, establishes a model facility program, and sets minimum recycled content standards for printing and writing paper. Revoked by E.O. 13101, then E.O. 13423.

14. E.O. 12898, February 11, 1994 (Reprinted as a Note at 42 U.S.C. 4321).

This E.O. requires Federal actions to address environmental justice in minority and low-income populations. The E.O. directs each Federal agency, wherever practicable and appropriate, to collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are subject to the reporting requirements under the EPCRA, sections 11001-1105, and that are expected to have a substantial environmental, human health, or economic effect on surrounding populations.

15. E.O. 12902, March 8, 1994. This E.O. requires Federal agencies to set goals for reducing energy consumption, increasing energy efficiency, auditing their facilities for energy and water use, purchasing energy efficient products, increasing the use of solar and other renewable energy sources, designating a "showcase" facility, and minimizing the use of petroleum-based fuel. Revoked by E.O. 13123, then E.O. 13423.

16. E.O. 13149, April 21, 2000. The purpose of this order is to ensure that the Federal Government exercises leadership in the reduction of petroleum consumption through improvements in fleet fuel efficiency and the use of AFVs and alternative fuels. Reduced petroleum use and the displacement of petroleum by alternative fuels will help promote markets for more alternative fuel and fuel efficient vehicles, encourage new technologies, enhance the United States' energy self-sufficiency and security, and ensure a healthier environment through the reduction of greenhouse gases and other pollutants in the atmosphere.

17. E.O. 13423, January 24, 2007. This E.O. requires Federal agencies to set goals to improve environmental, transportation, and energy-related activities in support of their mission. The E.O. directs Federal agencies to ensure that they are improving energy efficiency and reducing greenhouse gases; that at least half of the renewable energy consumed is from new renewable energy sources; water consumption intensity is reduced; bio-based, environmentally preferable, energy-efficient, water efficient, and recycled-content products are purchased; the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of is reduced; the use of petroleum-based fuel in agency fleets is minimized; new construction and major renovations comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings MOU (2006); whenever possible Electronic Product Environmental Assessment Tool products are acquired; Energy Star features are on agency computers and monitors; policies to extend the useful life of electronic equipment are implemented, and environmentally sound practices are used with respect to the disposal of electronic equipment that has reached the end of its useful life. E.O.s 13148 and 13149 are revoked.

18. E.O. 13514, October 5, 2009. This E.O. expands on Federal agency energy reduction and environmental performance requirements identified in E.O. 13423. The primary goal of reference this E.O. is to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of GHG emissions a priority for Federal agencies. DOD Instruction 4715.17 requires DOD to develop and annually update a SSPP that lays out how targets and performance goals per E.O. 13514 will be accomplished.

D. DOD DIRECTIVES AND INSTRUCTIONS

1. DOD Instruction 4715.17.

E. SECRETARY OF THE NAVY INSTRUCTIONS (SECNAVINST)

1. SECNAVINST 5000.2C.
2. SECNAVINST M-5210.1
3. SECNAVINST 5520.3.
4. SECNAVINST 5720.42F.
5. SECNAVINST 5720.44B.
6. SECNAVINST 5820.8A.

F. NAVAL FACILITIES (NAVFAC) PUBLICATIONS

1. NAVFAC P-442, Economic Analysis Handbook.

G. NAVAL MEDICINE (NAVMED) PUBLICATION

1. NAVMED P-5010, Manual of Naval Preventative Medicine.

H. CHIEF, BUREAU OF MEDICINE AND SURGERY (BUMED) INSTRUCTION

1. BUMEDINST 6280.1A.

I. NAVAL OPERATIONS INSTRUCTIONS (OPNAVINST)

1. OPNAVINST 5100.25G.
2. OPNAVINST 6250.4B
3. OPNAVINST 11010.36B.

J. MARINE CORPS ORDERS

1. Marine Corps Bulletin 1200. This bulletin describes the specific responsibilities and duties of MOS 8056, HM/HW Marine and Officer; and MOS 8831, Environmental Engineering Management Officer.
2. MCO 1553.1B. This order delineates the SAT requirements which are applicable to Marine Corps formal schools, training centers, and formal courses of instruction at other military schools.
3. MCO 1553.7. This order contains procedures for requesting information about required training courses through the BNA System, which allocates course space to Marine Corps students.
4. MCO 1520.9G. This order contains specific prerequisites and other

information regarding MOS 8831, Environmental Engineering Management Officer.

5. MCO 1560.19E. This order contains specific prerequisites and other information regarding MOS 8831, Environmental Engineering Management Officer.

6. MCO 4140.5. This order implements DOD 4140.27-M, Shelf-Life Item Management Manual.

7. MCO P4400.150E. This order sets forth policies for consumer level supplies.

8. MCO 4450.12A. This order provides policies, procedures, and responsibilities for the receipt, storage, transportation, and handling of HW and HM.

9. MCO 4450.13A. This order contains procedures for HM shelf-life management and criteria for extending type II shelf-life items published in the DOD Quality Status List.

10. MCO 4555.3C. This order outlines policies, procedures, and responsibilities for the recovery of precious metals.

11. MCO 4733.1B. This order requires commanders to establish procedures for the calibration, safe operation, and maintenance of test, measurement, and diagnostic equipment that supports the installation's environmental management program.

12. MCO P4790.2C. This order requires commanders to establish procedures for the control of tool sets, chests, and kits and other equipment that supports the installation's environmental management program.

13. MCO 4860.3D. This order supplies guidance for performing commercial and industrial-type activities.

14. MCO 5040.6H. This order describes the CGIP and requires that the administrative aspects of an installation's environmental program be evaluated at least every two years.

15. MCO 5104.1B. This order sets forth guidance for laser hazard control.

16. MCO 5215.1K. This order promulgates policies and procedures for the management and administration of the Marine Corps Directives System, providing guidance on the review, preparation, filing, and maintenance of Marine Corps directives.

17. MCO P5580.2A. This order includes policies and procedures for reporting noncompliance.

18. MCO 7301.116. This order provides procedures governing unfunded reimbursable accounts.

19. MCO P11000.5G. This order supplies guidance for requesting funds to support environmental compliance requirements.

20. MCO P11000.12C. This order supplies guidance for requesting funds for construction activities involved with environmental compliance requirements.

APPENDIX C

PROCESSING ENFORCEMENT ACTIONS

A. GENERAL. An enforcement action is an action taken by an environmental regulatory agency to enforce statutory and/or regulatory environmental compliance requirements. Nomenclature of enforcement actions may include warning order, notice of deficiency, NOV, citation, administrative complaint, notice of non-compliance, administrative order, corrective action order, immediate compliance order, delayed compliance order, or emergency power order. The relative gravity of an NOV or other enforcement action, to include the possibility of monetary penalties, largely depends upon the frequency, severity, and duration of the environmental compliance violation(s) alleged as well as the degree of cooperation demonstrated after learning of the violations. When an installation or unit receives an enforcement action, prompt and complete action must be taken to protect human health and the environment and minimize further adverse administrative, civil, or criminal enforcement action against the installation or unit and the individual(s) responsible for receiving the enforcement action.

B. DEFINITION OF ENFORCEMENT ACTION

1. United States and Territories. A formal, written notification by the EPA or other Federal, state, inter-state, regional, or local environmental regulatory agency of violation of any applicable statutory or regulatory requirement. It should cite the relevant standard or criteria to be met and request the installation take corrective action. An enforcement action does not include warning letters that do not cite a violation of specific environmental law or regulation, informal notices of deficiencies, or notices of deficiencies to permit applications. (Note: Warning letters or similarly titled formal written notifications from authorized regulators that do cite violations with environmental laws and regulations, are considered EAs.)

2. Overseas. An enforcement action is a formal, written notification by the appropriate host nation environmental regulatory authority of any applicable environmental standard (as defined in the FGS). It should cite the relevant standard or criteria to be met and request the installation take corrective action. An enforcement action does not include warning letters that do not cite a violation of specific environmental law or regulation, informal notices of deficiencies, or notices of deficiencies to permit applications.

C. SNC. An EPA term describing facilities that have a violation of significant magnitude and/or duration that warrants priority for review and/or response by an agency. Currently, EPA only tracks Federal facilities that are identified as "major" under references (a), (b), and (c). The definition of "major" and "significant non-compliance" varies by media. The air program uses the term High Priority Violation (HPV) instead of SNC, but for the purposes of this chapter, SNC includes HPV. EPA Program offices are the source of media specific definitions.

D. SETTLEMENT AGREEMENTS. If the installation or unit does not contest the NOV or other EA, the environmental regulatory agency may demand the execution of a settlement agreement. Settlement agreement terms vary significantly and

shall be negotiated by counsel. Basic settlement agreement terms may include a statement of facts and conclusions of law, penalty assessment and payment provisions, a list and description of environmental compliance projects, and an environmental compliance schedule.

E. REPORTING OF ENFORCMENT ACTIONS

1. Informal Indication of an enforcement action. Each installation and unit, upon receipt of any informal (e.g., oral) indication of an NOV or other enforcement action (hereinafter collectively referred to as "enforcement action"), shall:

a. Consult with counsel. The CMC (CL) offices have environmental compliance counsel to advise installations and units on how to prepare for the enforcement action; and

b. When significant natural resources damage occurs, and/or when immediate, adverse publicity is anticipated, notify CMC (LF) by telephone or electronic mail on the same day of receiving the informal enforcement action indication, unless serious incident reporting is required by reference (d).

2. Formal Receipt of an enforcement action

a. Upon receipt of any enforcement action, regardless of whether a response is required, the cited commander shall ensure the installation or unit reports the enforcement action.

b. Within five working days after the installation's or unit's receipt of the enforcement action, the installation or unit shall make appropriate entries into the EMR data base and the Marine Corps environmental program database tool and submit a Report of NOV/Notice of Noncompliance (RCS MC-5090-01) to CMC (LF). The report shall be submitted by routine radio message, with information copies to: the Assistant Deputy Chief of Staff, Installations and Logistics (Facilities), via the chain of command; the applicable CMC (CL) Office of Counsel; and the applicable REC. The message writing system to be used is the Defense Messaging System using "CMC WASHINGTON DC L LF" as the addressee. Additionally, submit via email a copy of the NOV report to CMC (LF) within five working days. The message and email shall contain the following information:

- (1) Name of cited installation, unit, and/or individuals.
- (2) Name of issuing agency.
- (3) Date of written notice and date received by the cited installation, unit, and/or individuals.
- (4) Certification that an appropriate entry in EMR and the Marine Corps environmental program database tool is complete.
- (5) Statute or regulation cited (with specific section).
- (6) Cited findings or deficiencies in the following categories:

(a) Class I: Releases to the environment.

(b) Class II: Violations with a potential to cause a release to the environment.

(c) Class III: Administrative procedural violations (e.g., allegations of improper paperwork, report filings, and labeling). Note: A notice alleging an improper or incomplete permit application is not, by itself, an enforcement action.

(7) Identification of the root cause, consistent with the categories defined in EMR and Marine Corps environmental program database tool.

(8) Amount of any monetary penalty assessed.

(9) Discussion of compliance actions sought, to include whether the regulatory agency offers a settlement proposal or whether the installation or unit contemplates settlement, and if so, whether a Supplemental Environmental Project may be applicable to reduce a monetary penalty.

(10) Estimate of current risks for environmental harm posed by the circumstances giving rise to the alleged violations.

(11) Description of required compliance actions or projects, to include estimated costs and Marine Corps environmental program database tool project number(s), as required.

(12) Commander's POC to include commercial and Defense Switching Network voice and fax phone numbers and email address.

c. The cited commander shall also ensure the installation or unit makes the appropriate EMR and Marine Corps environmental program database tool follow-on entries. Any changes to the status of the enforcement action shall be promptly recorded in EMR and the Marine Corps environmental program database tool.

#### F. ENFORCEMENT ACTION CLOSURE

1. An enforcement action is closed when any one of the following conditions exists:

a. The regulatory agency states, in writing, that it is satisfied with the installation or unit compliance actions and no further enforcement/actions will be taken regarding the violations alleged within the enforcement action. Note that certain statutory/regulatory schemes provide for shared or delegated enforcement authority between state and Federal agencies. In the event the installation receives an NOV, installation compliance officials should ensure that all regulatory authorities possessing enforcement power are satisfied with the installation's compliance actions. For example, even if a state regulatory agency deems compliance actions satisfactory, Federal authorities may still commence an enforcement action. This is known as 'overfiling.' Thus, it is necessary to ensure that all

potential EAs are resolved.

b. The regulatory agency, in writing, rescinds the enforcement action.

c. The regulatory agency supersedes the enforcement action with another action.

d. A settlement agreement is executed regarding the violations alleged within the enforcement action.

2. When the installation or unit commander cannot close an enforcement action with a regulatory agency after compliance actions are complete, the installation or unit shall:

a. Informally contact the regulatory agency to request written confirmation of compliance action completion and enforcement action closure.

b. If the regulatory agency does not provide a confirmation of compliance action completion and enforcement action closure, the installation or unit shall send a letter to the regulatory agency explaining its compliance actions and requesting enforcement action closure. A copy of the enforcement action shall be enclosed with the letter, and the letter shall state that the installation or unit commander will consider the enforcement action closed if the regulatory agency does not confirm the enforcement action's closure within 60 days following receipt of the letter. The letter shall be sent via United States certified mail with return receipt requested or via another delivery method documenting the letter's receipt.

c. If the regulatory agency does not respond to the letter within 60 days after its receipt, the installation or unit shall send a follow-up letter. The follow-up letter shall reference the previous letter and state that the regulatory agency's response has not been received and the enforcement action is now considered closed. The follow-up letter shall be sent via United States certified mail with return receipt requested or via another delivery method documenting the letter's receipt. Bear in mind that these letters do not legally preclude the regulatory agency from engaging in any further activity regarding the NOV which is authorized by law. They serve as a catalyst to inspire the regulatory agency to take final action and to memorialize that the installation commander scrupulously complied with all known requirements.

d. Finally, within five working days after regulatory agency receipt of the second letter without response, the installation or unit shall update EMR and the Marine Corps environmental program database tool to record the enforcement action's closure.

REFERENCES

- (a) 42 U.S.C. 6901-6992k
- (b) 33 U.S.C. 1251-1387
- (c) 42 U.S.C. 7401-7671
- (d) MCO 3504.2

APPENDIX D

DESKTOP PROCEDURES AND TURNOVER FOLDERS

A. DESKTOP PROCEDURES

1. Frequent personnel changes within installations and units challenge their maintenance of environmental compliance expertise and the continuity of their day-to-day operations. The proper use of desktop procedures and turnover folders alleviates these challenges and improves overall efficiency. It also provides work force continuity when unforeseen events suddenly remove a long-term employee.

2. Each installation and unit shall prepare and maintain desktop procedures for each environmental billet (e.g., HW handlers, recycling materials handlers, Marine Corps environmental program database tool clerks, ECE evaluators, Environmental Management System coordinators, and environmental compliance training specialists). Desktop procedures need not be all-inclusive or formal; rather, they may simply be a list of significant items and standardized instructions pertinent to an environmental billet's position description or duties. Normally, desktop procedures should include such items as current references; step-by step procedures for completing required duties; points-of-contact names, telephone numbers, and email addresses; and instructions for required reports.

3. Desktop procedures are current, concise instructions and shall not duplicate information within the turnover folder when the two documents are within the same record. Desktop procedures should also not be voluminous, however, as this will discourage their use. Each civil servant environmental billet position description shall make reviewing and updating the billet's desktop procedures a major duty or responsibility.

B. TURNOVER FOLDERS

1. Each installation and unit shall prepare and maintain a turnover folder for each environmental billet. Each civil servant environmental billet position description shall make reviewing and updating the billet's turnover folder a major duty or responsibility. Turnover folder contents may be included within desktop procedures and shall, specific to the billet incumbent, contain:

a. The billet title.

b. The immediate supervisor's billet title, and the title(s) of any subordinate billet(s) within the chain of command (a Table of Organization may be used).

c. A copy of the commander's environmental statement (see paragraph 2216 of this Manual).

d. The position description (for civil service employees) or the billet description.

e. A list of position description or billet description major duties and responsibilities (for civil service employees, these should already be in the position description).

f. A list of tasks essential to performing the billet's major duties and responsibilities.

g. A list of billet education or billet training requirements (e.g., initial and incumbent refresher) and the training plan.

h. A list generally referencing the environmental laws, regulations, orders, and other instructions directly related to the billet.

i. A list of required reports, required report due dates, and evidence of required report submittals for at least three prior fiscal years.

j. A list of environmental compliance permits for which the incumbent is responsible and a description of the activities for which the permits are applicable.

(1) For unit billets, the permit list and activity descriptions shall be limited to the permits held by the installation or unit directly affecting unit operations. The activity descriptions shall identify each permitted activity location, generally describe each activity subject to permitting, and identify any additional installation or unit BMPs limiting the activity apart from permit requirements (e.g., vehicles will be washed only on wash racks).

(2) For installation billets, the permit list and activity descriptions shall include a list of all applicable permits. Using a database format, the activity descriptions shall, at a minimum, identify the location (e.g., building number, grid coordinate) of each permitted activity, generally describe each activity subject to permitting; list each permit's expiration date, list and describe each permit fee, identify each fee's payment period (e.g., annually, quarterly, monthly) and due date, list the Marine Corps environmental program database tool entry number to pay the permit fee; identify the unit POC (name, rank, unit, and billet) and phone number, and identify the frequency of compliance inspections.

k. A Plan of Actions and Milestones (POA&M) for studies and other projects required for each environmental compliance permit and the corresponding Marine Corps environmental program database tool entry number for each project's funding request. This turnover folder section may be separate from the turnover folder if it is too large for it. If separate, the turnover folder shall incorporate the POA&M and corresponding Marine Corps environmental program database tool entry numbers by reference and identify their location.

l. A list of environmental compliance and/or coordination activities (and their contact information). The list shall include environmental coordinators and Federal, state, and/or local regulators.

m. A list of other points of contact internal and external to the

installation, with telephone numbers and mailing and email addresses. The list shall briefly describe each contact's general relationship to the billet.

n. Miscellaneous information (e.g., administrative or operational procedures peculiar to the billet, such as shared billet duties and responsibilities).

o. An itemized and current list of all applicable past, ongoing, and anticipated environmental compliance projects. This list may also include recent environmental compliance POA&Ms, a printout of current Marine Corps environmental program database tool projects, and status reports of pending projects including critical path diagrams using program evaluation and review techniques or bar charts plotting project tasks over time.

p. An itemized and current list of all applicable past, ongoing, and anticipated environmental compliance projects and other compliance actions from the last Benchmark ECE, environmental audit, and/or IGMC inspection. This list shall contain excerpts from the ECE POA&M.

2. Each installation and unit shall organize its turnover folders to permit billet incumbents to continuously improve them. Installation and unit commanders may establish procedures for turnover folder organization and the sufficiency of detail required to satisfy turnover folder content requirements.

APPENDIX E

MINIMUM REQUIREMENTS FOR THE EMS SITE USAGE ON THE ENVIRONMENTAL MANAGEMENT  
(EM) PORTAL

A. General

This appendix provides the minimum requirements for EMS site usage on the Marine Corps' prescribed risk software.

B. Background. Installations shall, at a minimum, upload the required documents listed below to the prescribed risk database in order to facilitate EMS conformance review during self- and HQMC-sponsored ECEs. Additional documents, including the recommended documents listed below, may be uploaded at the installation's discretion.

Table E-1.--Documents to be Posted to the EM Portal			
Element Number	Element Title	Required Documents	Recommended Documents
1	Environmental Policy Statement	Post Environmental Policy Statement	NA
2	Practices, Aspects, Impacts, and Risk Prioritization	Post list of significant aspects and practices	NA
3	Legal and Other Requirements	Post inventory of applicable local environmental compliance requirements (local law, base orders)	NA
4	Objectives, Targets, and Actions to Improve Performance	Post objectives and targets and associated Plans of Action and Milestones (POA&Ms)	
5	Roles, Responsibilities, and Resources	Post EMS Organization Chart	Post EMS Team appointment letters and charter  Post list of contractors associated with significant environmental aspects

Table E-1.--Documents to be Posted to the EM Portal-- Continued			
6	Competence, Training, and Awareness <sup>(1)</sup>	NA	NA
7	Communication	NA	Post any communication tools (emails, memoranda, posters, etc.) above and beyond training and practice control procedures that have been used to communicate environmental requirements  Post EMS Team meeting minutes
8	EMS Documentation	Post EMS Manual	
9	Control of Documents	NA	Document inventory
10	Operational Control of Practices	NA	Post operational control procedures for significant practices
11	Emergency Preparedness and Response	NA	Emergency response plans and procedures (e.g. SPCC, HW Contingency Plan, etc.)
12	Monitoring and Measurement	NA	Post charts, graphs or other data showing progress towards objectives and targets
13	Evaluation of Compliance	NA	Post self audit (ECE) plan and ECPSOP
14	Problem Solving	NA	Process and results of past problem solving efforts

Table E-1.--Documents to be Posted to the EM Portal--Continued			
15	Control of Records	NA	Records inventory
16	EMS Review	Post Annual EMS Conformance Letter with Auditors' Certificates	NA
17	Management Review	Post management review briefings Post signed management review meeting minutes	Management review briefing materials

<sup>1)</sup> Training materials and the CETEP Plan should be posted on the EM Portal.

APPENDIX F

HEADQUARTERS MARINE CORPS, FACILITIES AND SERVICES DIVISION (CMC (LF))-  
SPONSORED ENVIRONMENTAL COMPLIANCE EVALUATION (ECE) REPORT FORMAT

1. DRAFT ECE REPORT. The Draft ECE Report for the CMC (LF)-sponsored ECEs will contain, as a minimum, the following:

a. Preliminary Executive Overview. Prepared by the CMC (LF) Team Leader and normally three pages in length, this document is the out-brief to the installation commander. It contains the following parts: definitions, deficiencies, positive comments, areas of concern and interest, a request for comments and the Plan of Actions and Milestones (POA&M), a request for an evaluation of the ECE team, and a summary of the deficiencies presented in tabular format.

b. Media Overview. Prepared by the media-specific evaluator. This is a three to five sentence paragraph providing the installation commander with a word picture of the status for each media area evaluated. As part of the media overview, a table summary will be included. This summary will contain, at a minimum, the program media, type of evaluation (document review, interview, or visit), location or document title and date, building number, and installation POC.

c. Positive Findings. Positive results which warrant specific attention from the commander.

d. Deficiencies. This section includes all deficiencies (findings, discrepancies, and issues).

e. Not Reviewed. This section includes questions not reviewed by the ECE team. These questions will require research by the installation commander to determine whether they apply to the installation and the installation environmental compliance status.

f. Yes Section. This section includes all questions receiving a positive or "yes" response that include comments.

2. POA&M. The installation commander will develop and submit a POA&M using the POA&M module within Web-Based Compliance Assistance and Sustainment Software (WEBCASS). An installation commander's comment field is provided in the WEBCASS POA&M module. This field is for the installation commander to describe the corrective action taken or projects to be developed to solve and/or prevent the noted situation. Any disagreement with the ECE team's report should be placed in the installation commander's comment field. The POA&M is a dynamic document with management flexibility built into the reporting format to allow the commander to track and document progress.

3. FINAL ECE REPORT. The Final Report is made up of the following: the Final Report cover letter, the notification of the POA&M report with installation commander and Higher Headquarters' comments available via

WEBCASS, and the draft out-brief report with appropriate administrative mark outs. A copy of the Final Report cover letter with the POA&M will be provided to the IGMC by the CMC (LF).

APPENDIX G

ENVIRONMENTAL TRAINING REQUIREMENTS

1. MCO P5090.2A Ch. 3, Chapter 5 requires each installation and Marine Corps Forces Reserve to prepare a specific CETEP plan that details the number of personnel subject to identified Federal, state, local and Marine Corps environmental training requirements. Environmental training is any form of instruction and information that is based upon, derived from, or guided by environmental laws, regulations, or environmental policies. Training derived from other laws, regulations, or policies (e.g., DOT regulations or safety policy) that are required to perform environmentally-related functions may also fall under this definition.
2. Table G-1 summarizes the most common Federal and Marine Corps environmental training requirements for personnel performing environmental job functions. When preparing CETEP plans, installations should evaluate all regulated operations conducted aboard the base or station against Table G-1 and state and local training requirements, including training incorporated into installation management plans (e.g., INRMP, Stormwater P2 Plans).
3. The CETEP plan should detail the specific strategies, courses, and training venues that will be used to cost effectively ensure that personnel receive the required training. In some cases, training may be sponsored by other offices on the installation (e.g., safety office, medical clinic). Installations performing unique environmental functions not listed in table G-1 should ensure personnel receive applicable required training.

Table G-1.--Training By Regulation			
Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
<b>Air Emissions Management</b>			
CAA - Motor Vehicle HVAC Mechanics	Personnel servicing motor vehicle air conditioning equipment	Certification required	Ref. (a), part 30(b) Ref. (b), para. 6302.16
CAA - HVAC Appliance Service, Repair, Disposal Personnel	Personnel servicing, maintaining, repairing or disposing of air conditioning equipment	Certification required	Ref. (a), part 150(b) Ref. (b), para. 6302.16
<b>Environmental Planning</b>			
NEPA	Personnel with environmental planning responsibilities	Prior to beginning work	Ref. (b), para. 12104.2e
<b>Natural Resources Management</b>			
Natural Resources Law Enforcement Training	Personnel engaged in conservation law enforcement	Prior to beginning work; annual refresher training	Ref. (c), para. (2)(c) & Section III
Natural Resource Personnel Training	Personnel who manage natural resources	Prior to beginning work	Ref. (d), part 190.5c(2) Ref. (b), para. 11104.1(c)

Table G-1.--Training By Regulation-- Continued			
Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
<b>Hazardous Materials Management</b>			
Hazardous Materials (HAZMAT) Transportation Employee Training	Personnel involved in the preparation for, and transportation or shipment of hazardous material/hazardous waste (HM/HW)	Within ninety (90) days of employment; refresher training at least once every three (3) years	Ref. (e), part 40B Ref. (f), part 700
HAZMAT Transportation - Modal Specific Training	Personnel involved in the transportation or shipment of HM/HW by air, vessel or motor vehicle	Within ninety (90) days of employment; refresher training at least once every three (3) years	MCO 4030.40B Ref. (f), part 700 Ref. (g), part 20(b) Ref. (h), part 13(b) Ref. (i), part 800(c)
Hazardous Chemicals - Laboratories	Personnel engaged in the laboratory use of hazardous chemicals	Prior to beginning work; refresher training determined by employer	Ref. (j), part 1450(a)
Resource Conservation and Recovery Act - Large Quantity Generators (LQG)	Personnel who generate, accumulate or handle HW at LQG facilities	Within six (6) months of beginning work; annual review of initial training requirements	40 CFR part 262.34 40 CFR part 264.16 Ref. (b), para. 9104.1.h(2)(j) and 9404.1.b(13)

Table G-1.--Training By Regulation-- Continued			
Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
HW Accumulators	Personnel who accumulate hazardous waste	Prior to beginning work	Ref. (b), para. 9104.1.h.(2)(j)
RCRA Treatment, Storage and Disposal Facility (TSDF) Operators	Personnel assigned to work at a permitted TSDF	Within six (6) months of beginning work; annual review of initial training requirements	Ref. (k), part 34 Ref. (l), part 16
Waste Military Munitions	Personnel involved with handling, storage, transportation, and treatment of Waste Military Munitions	Prior to beginning work	Ref. (j), part 120 Ref. (m), part 65
Regulated Infectious Waste	Personnel with occupational exposure to infectious waste	Prior to beginning work; annual refresher training	Ref. (j), part 1030(g)(2) Ref. (n)
Pesticides Management			
FIFRA - Applicators	Personnel who apply or supervise the application of pesticides and contract Quality Assurance Evaluators	Certification required for restricted use pesticides	Ref. (o), part 130 (a)(3) Ref. (p) Ref. (q) Ref. (b), Chap. 14

Table G-1.--Training By Regulation-- Continued			
Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
<b>POL Management</b>			
Oil Pollution Facility response exercises	Facility owners or operators who must develop a program of facility response drills/exercises as detailed in the FRP	At least once every three (3) years	Ref. (r), part 21c Ref. (s), part 1055 Ref. (b), para. 7104.8a(1), 7104.8b(2), 7203.2
Spill Prevention Control and Countermeasures (SPCC) discharge prevention training	Employees involved in the operation and maintenance of equipment that may discharge oil as identified in the installation SPCC plan	At least annually	Ref. (r), part 7(f) Ref. (b), para. 7102.2c(5), 7104.8a(2)
<b>Toxic Substances Management</b>			
Hazard Communications	Employees who may be exposed to hazardous chemicals under normal operations conditions or in foreseeable emergencies	Prior to beginning work	Ref. (j), part 1200(h)(1) Ref. (t), Ref. (u) Ref. (v), para. 17001.2

Table G-1.--Training By Regulation--  
Continued

Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
Hazardous Waste Operations and Emergency Response (HAZWOPER) for Emergency Response - Awareness Level & Refresher	Personnel who are likely to witness or discover a release of a hazardous substance and may initiate emergency response by notifying authorities	Prior to beginning work; annual refresher training	Ref. (j), part 120 (q)(6)(i)
HAZWOPER General Site Workers & Refresher	Personnel assigned to work at an uncontrolled Installation Restoration site	Prior to beginning work; annual refresher training	Ref. (j), part 120(e)
HAZWOPER Emergency Response Operations & Refresher	Personnel who respond to HM releases in a defensive fashion without trying to stop the release	Prior to beginning work; annual refresher training	Ref. (j), part 120 (q)(6)(ii)
HAZWOPER Emergency Response Technician/Specialist and Refresher	Personnel responding in an aggressive action to HM spills so they may plug patch or stop the release of HM	Prior to beginning work; annual refresher training	Ref. (j), part 120 (q)(6)(iii)
HAZWOPER TSDF Operations and Refresher	Personnel assigned to work at a permitted TSDF	Prior to beginning work; annual refresher training	Ref. (j), part 120 (p)(7)(i)

Table G-1.--Training By Regulation--  
Continued

Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
HAZWOPER Emergency Response On Scene Incident Commander	Personnel who will control and/or manage spill response operations	Prior to beginning work; annual refresher training	Ref. (j), part 120 (q)(6)(v)
Post Emergency Response Worker	Personnel that may perform spill cleanup operations after the threat of release is stabilized or eliminated	Prior to beginning work; annual refresher training	Ref. (j), part 120(q)(11)
Asbestos Training - Supervisors/ Worker/Contractors & Refresher	Personnel, supervisors and contractors engaged in maintenance activities that disturb friable asbestos	Prior to beginning work; annual refresher training	Appendix C of ref. (w) Ref. (b), para. 6302.16
Asbestos Inspector & Refresher	Personnel who inspect for Asbestos Containing Building Material (ACBM) in schools or public commercial buildings	Prior to beginning work; annual refresher training	Appendix C of ref. (w) Ref. (b), para.6302.16
Asbestos Project Designer & Refresher	Personnel who design projects that may disturb friable ACBM in a school or commercial building	Prior to beginning work; annual refresher training	Appendix C of ref. (w) Ref. (b), para. 6302.16

Table G-1.--Training By Regulation-- Continued			
Training Requirement	Who Must Be Trained	When Training Must Occur	Regulation or Policy Driver
Asbestos Project Monitor & Refresher	Personnel who monitor abatement projects and serve as building owners representative	Prior to beginning work; annual refresher training	Appendix C of ref. (w) Ref. (b), para. 6302.16
Asbestos for Maintenance Custodial Staff	Maintenance and custodial personnel who may come in contact with ACBM	Prior to beginning work; annual refresher training	Ref. (x), part 1001 (j)(7)(i) Ref. (u) Ref. (v). para. 15006.2
Bloodborne/Infectious Pathogens Exposure	Personnel who may be exposed to blood or other potentially infectious materials	Prior to beginning work; annual refresher training	Ref. (j), part 1030 (a) Ref. (u), para. 21002.2
<b>Water Quality Management</b>			
SDWA training, certification and licensing	Personnel who operate drinking water systems	None specified.	Ref. (b), para. 16212.2
<b>General</b>			
Environmental General Awareness	All USMC personnel	None specified.	Ref. (b), Chap. 5
CO/CG and SES Education	CO/CGs and SES	None specified.	Ref. (b), Chap. 5
General Pollution Prevention Awareness Training	All USMC personnel	None specified.	Ref. (b), para. 15202
Specific Pollution Prevention Training	Personnel whose job responsibilities require training in Emergency Planning & Community Right to Know Act Toxic Release Inventory reporting and pollution prevention planning and implementation	None specified.	Ref. (b), para. 15202

REFERENCES

- (a) 40 CFR 82
- (b) MCO P5090.2
- (c) MCO 5090.4
- (d) 32 CFR 190
- (e) MCO 4030.40B
- (f) 49 CFR 172
- (g) 49 CFR 175
- (h) 49 CFR 176
- (i) 49 CFR 177
- (j) 29 CFR 1910
- (k) 40 CFR 262
- (l) 40 CFR 264
- (m) 29 CFR 1926
- (n) BUMED INST 6280.1A
- (o) 40 CFR 170
- (p) DOD 4150.7M
- (q) DOD 4150.7P
- (r) 40 CFR 112
- (s) 33 CFR 154
- (t) DOD INST 6050.5
- (u) MCO 5100.8
- (v) NAVMC Directive 5100.8
- (w) 40 CFR 763.99 Subpart E
- (x) 29 CFR 1920

APPENDIX H

TEAM GUIDE TRAINING REQUIREMENTS

1. MCO P5090.2 chapter 5 requires each installation and Marine Corps Forces Reserve to prepare a specific CETEP plan that details the number of personnel subject to identified Federal, state, local and Marine Corps environmental training requirements. Environmental training is any form of instruction and information that is based upon, derived from, or guided by environmental laws, regulations, or environmental policies. Training derived from other laws, regulations, or policies (e.g., DOT regulations or safety policy) that are required to perform environmentally-related functions may also fall under this definition.

2. Table H-1 summarizes common Federal and Marine Corps environmental training requirements presented in reference (a) for personnel performing environmental job functions. When preparing CETEP plans, installations should evaluate all regulated operations conducted aboard the base or station against Table H-1 and state and local training requirements.

3. The CETEP plan should detail the specific strategies, courses, and training venues that will be used to cost effectively ensure that personnel receive the required training. In some cases, training may be sponsored by other offices on the installation (e.g., safety office, medical clinic). Installations performing unique environmental functions not listed in table H-1 should ensure personnel receive applicable required training.

Table H-1.--TEAM Training Guide					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Guide Checklist Item#
<b>Air Emissions Management</b>					
Air Conditioner/ Refrigerant Servicing	Facilities with personnel who perform air conditioning and/or refrigerant repair services	Those who service motor vehicle air conditioners.  Those who service, maintain, or repair appliances, and persons who dispose of appliances, except for small appliances, room air conditioners, MVACs, and MVAC-like appliances	Prior to beginning work	Training/ Certification records on file	Ref. (b)  Ref. (c) parts 34(a), 42, and 161  <b>Ref. (a): AE.90.1 AE.90.17</b>
Testing, maintaining, servicing, repairing or disposing of halon-containing equipment.	Facilities where technicians test, maintain, service, repair, or dispose of halon-containing equipment	Technicians who test, maintain, service, repair, or dispose of halon-containing equipment	Prior to beginning work	Training/ Certification records on file	Ref. (c) part 270(c)  <b>Ref. (a): AE.90.22</b>
Large Boilers	Facilities with large boilers for energy production	Boiler operators	Prior to beginning work	Facilities with large boilers for energy production	Ref. (b)  <b>State regulations</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Guide Checklist Item#
<b>Cultural Resources Management</b>					
Archaeological Collections	Facilities with Archeological collections/	Curation staff	Prior to beginning work		Ref. (d) Ref. (e), part 9(b)(4) Ref. (a): <b>CR.20.6</b>
<b>Hazardous Materials Management</b>					
Hazardous Materials	Facilities, other than laboratories, with petroleum products and hazardous materials	All employees who handle hazardous materials	At the time of initial assignment and whenever a new hazardous material is introduced into the workplace	Training records	Ref. (f) Ref. (g), part 1200 Ref. (a): <b>HM.10.2</b>
Hazardous Chemicals	Laboratories, with petroleum products and hazardous chemicals	All employees who handle hazardous chemicals	At the time of initial assignment and whenever a new hazardous chemical is introduced into the workplace	Training records	Ref. (f) Ref. (g), part 1450(f) Ref. (a): <b>HM.15.2</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Guide Checklist Item#
Personal Protective Equipment	Facilities in which the use of PPE is required	Employees required to use PPE by OSHA standards.	Prior to performing work using PPE	Written certification	Ref. (g), part 132(f)
Transportation of Hazardous Materials	Facilities involved in the transportation, shipment, or prep for shipment of hazardous materials	Employees involved in the transportation or shipment of hazardous materials/wastes	Within 90 days after employment or new job assignment	Written description of information, including certification (49 CFR 172.704(d))	Ref. (h) Ref. (i), part 704 Ref. (j), part 1(b) Ref. (k) parts 816(a) and (c)  Ref. (a): <b>HM.50.8.</b> <b>HM.50.9.</b>
Hazardous Waste Management					
Hazardous Waste Generators	Small Quantity Generators and Large Quantity Generators	Employees who handle hazardous waste	At the time of assignment	Training records, retain for 3 yr after employment at the facility	Ref. (l), Subtitle C Ref. (m) parts 34(d)(5)(iii) and 34(a)(4)  Ref. (a): <b>HW.25.1.</b> <b>HW.60.1.</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Guide Checklist Item#
Hazardous Waste Treatment Storage and Disposal Facilities	Facilities operating TSDFs	All TSDF employees who handle hazardous waste	At the time of assignment	Training records, retain for 3 yr after employment at the facility	Ref. (l), Subtitle C  Ref. (n) and (o), parts 16(a)-(c)  Ref. (a): <b>HW.110.1,</b> <b>HW.110.2</b>
<b>Pesticides Management</b>					
Restricted Use Pesticide Applications	Facilities that use or obtain services related to restricted-use pesticides	- Applicators - Pesticide Contractor - Inspectors	Before Application	Training records. Application/exposure	Ref. (p)  Ref. (q), part9  Ref. (a): <b>PM.5.1</b>
Pesticide Applications other than Restricted Use Pesticides	Facilities that use or obtain services related to pesticides and herbicides other than restricted-use pesticides	- Applicators - Pesticide Contractor - Inspectors	Before Application	Training records; Application/exposure records	<b>State Regulations</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Guide Checklist Item#
<b>POL Management</b>					
Spill prevention and response	Facilities that are required to have an SPCC plan	All employees who handle POL	At the time of assignment	Training records	Ref. (r)  Ref. (s), parts (d) and (e)(10)  Ref. (a): <b>PO.5.7</b>
<b>Toxic Substances Management</b>					
Asbestos Training for: -Demolition or salvage of structures where asbestos is present; -Removal or encapsulation of materials containing asbestos; -Construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos; -Installation of products	All employees who are likely to be exposed in excess of a PEL and for all employees who perform Class I through IV Asbestos operations.  This does not apply to asbestos containing asphalt roof coatings, cements and mastics.	- Contract Inspectors/ Overseers - Removers/Workers Who Perform Asbestos Removal - Designers  (NOTE: The material covered in the training is dependent on the Class of asbestos operations being performed. See the text of 29 CFR 1926.1101(k)(9) for specifics.)	Prior to or at the time of initial assignment and at least annually thereafter.	Training records; removal and disposal records	Ref. (f)  Ref. (t) part 1101(k)(9)

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Checklist Item#
<b>Toxic Substances Management</b>					
containing asbestos; -Asbestos spill/emergency cleanup; - Transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products					
Asbestos Training (Demolition or Renovation)	Demolition of structures containing at least 80 linear meters (260 linear ft) of Regulated Asbestos-Containing Material (RACM) on pipes, or at least 15 m <sup>2</sup> (160 ft <sup>2</sup> ) of RACM on other components or at least 1 m <sup>3</sup> (35 ft <sup>3</sup> ) off facility	Onsite representative.	Before asbestos work begins	Training records; removal and disposal records	Ref. (b) Ref. (u), part 145(c)(8)  <b>Ref. (a): T2.10.1</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Checklist Item#
<b>Toxic Substances Management</b>					
	<p>components. Renovation of structures and stripping or removing at least 80 linear meters (260 linear feet) of RACM on pipes, or at least 15 m<sup>2</sup> (160 ft<sup>2</sup>) of friable asbestos on other facility components and at least 1 m<sup>3</sup> (35 ft<sup>3</sup>) off facility components Onsite representative trained in asbestos removal is present</p>				

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Checklist Item#
<b>Toxic Substances Management</b>					
Asbestos Training (Schools)	Schools with asbestos	The person designated by the local education agency to ensure that requirements concerning asbestos in school are implemented correctly. All members of the school maintenance and custodial staff who might work in a building that contains Asbestos Containing Building Materials (ACBM) are required to receive at least 2 hr of awareness training whether or not they are required to work with ACBM. School maintenance and custodial staff that conduct any activities that will result in the disturbance of ACBM are required to receive an additional 14 hr of training.	Prior to the start of work	Training records	Ref. (v)  Ref. (w), parts 84(g), 88(d), and 92(a)  (Ref. (a): <b>T2.20.5</b> <b>T2.20.8</b> <b>T2.20.9</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Checklist Item#
<b>Toxic Substances Management</b>					
Lead-Based Paint Removal	Facilities with Lead-Based Paint removal activities	<ul style="list-style-type: none"> <li>- Abatement workers</li> <li>- Project designers</li> <li>- Inspectors</li> <li>- Risk assessors</li> <li>- Supervisors</li> </ul>	Prior to the start of work. Recertification is done: - every 3 yr if the individual completed a training course with a course test and hands on assessment - every 5 yr if the individual completed a training course with a proficiency test	Certification and training documentation	Ref. (v)  Ref. (x), part 226 (certification from an U.S. EPA accredited school is required as of 30 August 1999)  <b>Ref. (a):</b> <b>T4.15.1</b>

Table H-1.--TEAM Training Guide--Continued					
Topic	Applicability	Who Must Be Trained	When Must Training Occur	Record-keeping	Citation and TEAM Checklist Item#
<b>Solid Waste Management</b>					
Landfill Operator Certification	Facilities that operate landfills	Landfill operators	State regulations	Certification and training records on file	Ref. (y) <b>State regulations</b>
<b>Wastewater Management</b>					
Wastewater System Operator Certification	Facilities that operate wastewater treatment facilities (FOTWs)	Wastewater System Operator	State regulations, usually within 60 days after employment or start of a new job assignment	Certification and training records on file	Ref. (r) <b>State regulations</b>
<b>Water Quality Management</b>					
Drinking Water System Operator Certification	Facilities that operate public drinking water systems	Drinking Water System Operator	State regulations, usually within 60 days after employment or start of a new job assignment	Certification and training records on file	Ref. (z) <b>State regulations</b>

REFERENCES

- (a) U.S. Army Corps of Engineers, The Environmental Assessment and Management (TEAM) Guide.
- (b) 42 U.S.C. 7401 *et seq.*
- (c) 40 CFR 82
- (d) 16 U.S.C. 470 *et seq.*
- (e) 36 CFR 79
- (f) 29 U.S.C. 651 *et seq.*
- (g) 29 CFR 1910
- (h) 49 U.S.C 5101-5127
- (i) 49 CFR 172
- (j) 49 CFR 173
- (k) 49 CFR 177
- (l) 42 U.S.C. 6901 *et seq.*
- (m) 40 CFR 262
- (n) 40 CFR 264
- (o) 40 CFR 265
- (p) 7 U.S.C. 136 *et seq.*
- (q) 40 CFR 171
- (r) 33 U.S.C. 1251 *et seq.*
- (s) 40 CFR 112
- (t) 29 CFR 1926
- (u) 40 CFR 61
- (v) 15 U.S.C. 2601 *et seq.*
- (w) 40 CFR 763
- (x) 40 CFR 745

(y) 42 U.S.C. 3251 *et seq.*

(z) 42 U.S.C. 300(f) *et seq.*

APPENDIX I

OIL DISCHARGE AND HAZARDOUS SUBSTANCE  
RELEASE REPORTS MESSAGE FORMATS

1. TRANSMITTAL PRECEDENCE. Send oil discharge and HS release report messages by routine precedence if prior voice reports have been made to the U.S. Coast Guard NRC and the reporting command's Chain of Command, and in case of HS release, the HS is not classified as an EHS. Use priority precedence if prior voice report has not been made, the release is very large, threatens human health, requires evacuation of the local populace, is expected to result in significant environmental harm, or is expected to generate adverse publicity. Always use priority precedence for EHS release report messages.
2. CLASSIFICATION OR SPECIAL HANDLING MARKING. Do not include classified or sensitive unclassified information in the report, unless necessary for operational reasons. Report symbol DD-5090-10 applies.
3. OCONUS REPORTS. For releases occurring outside the United States, its territories, and its possessions, delete the Coast Guard District and the EPA region organizations from the addressee and information blocks in the message. Instead, add the appropriate higher headquarters to the list of addressees.
4. CORRECTING DISCHARGE/RELEASE REPORT MESSAGES. Oil discharge and HS release report messages should be updated with a follow-up message as soon as the reporting activity becomes aware of new information concerning the origin, amount, type of material, source, or lessons learned.
- 5E. MESSAGE DATA ELEMENTS. The essential data elements for reporting oil spills and HS releases are provided on the following pages. Installations may also submit the information via email to the appropriate POC at CMC (LF).

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//  
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)  
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)  
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)  
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)  
COMNAVFACENGCOM ALEXANDRIA VA  
COGNIZANT ENGINEERING FIELD DIVISION  
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LF

SUBJ: OIL SPILL REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH SPILL OCCURRED
2. ACTIVITY ORIGINATING SPILL (INSTALLATION; UIC)
  3. SOURCE (FUEL TANK, BARGE, PIPELINE, RAIL CAR, VEHICLE, AIRCRAFT, ETC.)
  4. LOCATION (AREA, BUILDING DESIGNATION, PIER, ETC.)
  5. AMOUNT (BARRELS, GALLONS, LITERS)  
IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
  6. TYPE (JP-5, GASOLINE, DIESEL, LUBE OIL, ETC.)
  7. CONTAINER AND OPERATION FROM WHICH RELEASE OCCURRED (DRUM, STORAGE TANK, FUELING, ETC.)
  8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
  9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
  10. RELEASE SCENE DESCRIPTION (OIL SLICK, CONTAMINATED AREA, ETC.)
  11. ACTION TAKEN/PLANNED:
    - A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
    - B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
    - C. AMOUNT OF OIL RECOVERED (BARRELS/GALLONS/LITERS OF DECANTED PURE PRODUCT)
    - D. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
    - E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
  12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
  13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
  14. POTENTIAL DANGERS (FIRE, EXPLOSION, OILED WILDLIFE, ETC.)
  15. ESTIMATED COST OF RECOVERY, IF KNOWN
  16. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
  17. LESSONS LEARNED
  18. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
  19. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
  20. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
  21. ASSISTANCE REQUIRED/COMMENTS
- //BT

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//  
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)  
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)  
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)  
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)  
COMNAVFACENGCOM ALEXANDRIA VA  
COGNIZANT ENGINEERING FIELD DIVISION  
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LF

SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH RELEASE OCCURRED
2. ACTIVITY ORIGINATING RELEASE (INSTALLATION; UIC)
  3. SOURCE (STORAGE AREA, SHOP, VEHICLE, ETC.)
  4. LOCATION (BUILDING DESIGNATION, PIER, HIGHWAY, RANGE, ETC.)
  5. AMOUNT (GALLONS/LITERS, POUNDS/KILOGRAMS)  
IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
  6. TYPE (PESTICIDES, CORROSIVE LIQUIDS, TOXIC SUBSTANCES, EXPLOSIVES, ETC.)
  7. CONTAINER AND OPERATION INVOLVED (DRUM, BAG, STORAGE TANK, RAIL CAR, PLATING TANK, PAINTING SHOP, ETC.)
  8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
  9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
  10. RELEASE SCENE DESCRIPTION (CONTAMINATED AREA, PATH OF RELEASE, ETC.)
  11. ACTION TAKEN/PLANNED:
    - A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
    - B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
    - C. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
    - D. AMOUNT OF HS RECOVERED (BARRELS/GALLONS/LITERS OR POUNDS/KILOGRAMS OF PURE PRODUCT)
    - E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
  12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
  13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
  14. POTENTIAL DANGERS (FIRE, EXPLOSION, TOXIC VAPOR, ETC.)
  15. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
  16. LESSONS LEARNED
  17. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
  18. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
  19. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
  20. ASSISTANCE REQUIRED/COMMENTS
- //BT

APPENDIX J

PROCEDURE TO IMPLEMENT WAIVER  
FOR THE USE OF DEFENSE REUTILIZATION AND MARKETING SERVICES

1. PURPOSE. This procedure identifies steps that should be followed at Marine Corps installations that generate and dispose of HW, and that make the decision to not use DLA Energy/DRMS for HW disposal.

2. APPLICABILITY. This procedure applies to all Marine Corps installations.

3. REQUIREMENTS. In accordance with reference (a), installation Commanding Officers (COs) are responsible for meeting their stated mission and have the authority to determine how to best accomplish that mission. In accordance with references (b) and (c), DLA Energy/DRMS are designated as the responsible agency for worldwide disposal of HW.

4. ACTIONS. Marine Corps installations shall use DLA Energy/DRMS for HW contract disposal services as much as economically and operationally feasible.

a. Cases in which DLA Energy/DRMS are not used by the installation to dispose of waste are due to special circumstances (e.g., cost effectiveness, type of waste, responsive time, quantity of waste and simplified control over the waste stream). In these circumstances, COs are permitted to contract directly for HW disposal services outside of DLA Energy/DRMS. In accordance with reference (c), "the DRMS should be first afforded the opportunity to redress any operational difficulties in providing services."

b. It is the responsibility of the installation CO to coordinate with CMC (LF) to ensure that installation contracts and disposal criteria are "at least as stringent as the criteria used by DRMS."

c. HW Disposal Contract Standards - Attachment 2 per reference (c).

(1) Provide 100 percent manifest tracking to maintain a "cradle to grave" audit trail of documentation for HW disposal (i.e., from original turn-in to final disposal).

(2) Monitor contractor performance at time of pickup by DOD personnel serving as Contracting Officer's Representative.

(3) Conduct extensive past performance and technical evaluation of prime contractor and subcontractors prior to contract award, and monitor during contract performance.

(4) Conduct onsite post award inspections of selected sub-contractors (e.g. treatment, storage, and/or disposal facility and transporters) to ensure compliance with regulatory requirements.

(5) Evaluate contractor performance and document current and past performance in a database. Ensure contract provisions comply with the Federal Acquisition Regulation and applicable Federal, state, and local

safety, environmental, and transportation regulations. Monitor contract costs to ensure competitive pricing as well as high quality contractor service.

(6) Reduce start-up, administrative, and re-procurement costs by preparing and awarding long-term contracts, if in the best interest of the DOD.

5. LIABILITY

Reference (c) indicates that DRMS may request information from Marine Corps installations, including a list of facilities using their own HW disposal contracting, that identifies the type of commodities handled and the prices paid. Additionally, overall liability and responsibilities are the same for those installations using DLA Energy/DRMS or outside HW contracting services.

6. TRANSMITTAL PRECEDENCE. Send oil discharge and HS release report messages by routine precedence if prior voice reports have been made to the U.S. Coast Guard NRC and the reporting command's Chain of Command, and in case of a HS release, the HS is not classified as an EHS. Use priority precedence if prior voice report has not been made, the release is very large, threatens human health, requires evacuation of the local populace, is expected to result in significant environmental harm, or is expected to generate adverse publicity. Always use priority precedence for EHS release report messages.

7. CLASSIFICATION OR SPECIAL HANDLING MARKING. Do not include classified or sensitive unclassified information in the report, unless necessary for operational reasons. Report symbol DD-5090-10 applies.

8. OCONUS REPORTS. For releases occurring outside the United States, its territories, and its possessions, delete the Coast Guard District and the EPA region organizations from the addressee and information blocks in the message. Instead, add the appropriate higher headquarters to the list of addressees.

9. CORRECTING DISCHARGE/RELEASE REPORT MESSAGES. Oil discharge and HS release report messages should be updated with a follow-up message as soon as the reporting activity becomes aware of new information concerning the origin, amount, type of material, source, or lessons learned.

10. MESSAGE DATA ELEMENTS. The essential data elements for reporting oil spills and HS releases are provided on the following pages.

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//  
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)  
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)  
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)  
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)  
COMNAVFACENGCOM ALEXANDRIA VA  
COGNIZANT ENGINEERING FIELD DIVISION  
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LF

SUBJ: OIL SPILL REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH SPILL OCCURRED
2. ACTIVITY ORIGINATING SPILL (INSTALLATION; UIC)
  3. SOURCE (FUEL TANK, BARGE, PIPELINE, RAIL CAR, VEHICLE, AIRCRAFT, ETC.)
  4. LOCATION (AREA, BUILDING DESIGNATION, PIER, ETC.)
  5. AMOUNT (BARRELS, GALLONS, LITERS)  
IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
  6. TYPE (JP-5, GASOLINE, DIESEL, LUBE OIL, ETC.)
  7. CONTAINER AND OPERATION FROM WHICH RELEASE OCCURRED (DRUM, STORAGE TANK, FUELING, ETC.)
  8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
  9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
  10. RELEASE SCENE DESCRIPTION (OIL SLICK, CONTAMINATED AREA, ETC.)
  11. ACTION TAKEN/PLANNED:
    - A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
    - B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
    - C. AMOUNT OF OIL RECOVERED (BARRELS/GALLONS/LITERS OF DECANTED PURE PRODUCT)
    - D. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
    - E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
  12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
  13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
  14. POTENTIAL DANGERS (FIRE, EXPLOSION, OILED WILDLIFE, ETC.)
  15. ESTIMATED COST OF RECOVERY, IF KNOWN
  16. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
  17. LESSONS LEARNED
  18. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
  19. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
  20. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
  21. ASSISTANCE REQUIRED/COMMENTS
- //BT

FM: ACTIVITY/COMMAND//CODE//

TO: CMC WASHINGTON DC//I-L//  
COMDT COGARD WASHINGTON DC (U.S. SPILLS ONLY)  
COGARD MSO AREA COORDINATOR (MARINE U.S. SPILLS ONLY)  
COAST GUARD DISTRICT COMMANDER (MARINE U.S. SPILLS ONLY)  
EPA REGIONAL OFFICE (INLAND U.S. SPILLS ONLY)

INFO: HIGHER HEADQUARTERS (IF APPLICABLE)  
COMNAVFACENCOM ALEXANDRIA VA  
COGNIZANT ENGINEERING FIELD DIVISION  
NFESC PORT HUENEME CA

UNCLAS //N06280//

PASS TO LF

SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT, REPORT SYMBOL DD-5090-10

- RMKS/1. DATE TIME GROUP IN WHICH RELEASE OCCURRED
2. ACTIVITY ORIGINATING RELEASE (INSTALLATION; UIC)
  3. SOURCE (STORAGE AREA, SHOP, VEHICLE, ETC.)
  4. LOCATION (BUILDING DESIGNATION, PIER, HIGHWAY, RANGE, ETC.)
  5. AMOUNT (GALLONS/LITERS, POUNDS/KILOGRAMS)  
IF UNKNOWN, INDICATE DIMENSIONS OF CONTAMINATED AREA
  6. TYPE (PESTICIDES, CORROSIVE LIQUIDS, TOXIC SUBSTANCES, EXPLOSIVES, ETC.)
  7. CONTAINER AND OPERATION INVOLVED (DRUM, BAG, STORAGE TANK, RAIL CAR, PLATING TANK, PAINTING SHOP, ETC.)
  8. SAMPLES TAKEN (YES/NO; SPECIFY ANALYSES REQUESTED/PERFORMED)
  9. CAUSE OF RELEASE (EQUIPMENT FAILURE, PERSONNEL ERROR, ACCIDENT, ETC.)
  10. RELEASE SCENE DESCRIPTION (CONTAMINATED AREA, PATH OF RELEASE, ETC.)
  11. ACTION TAKEN/PLANNED:
    - A. CONTAINMENT EFFORTS (BOOM, ABSORBENT PADS, DRY SWEEP, ETC.)
    - B. RECOVERY EFFORTS (SUCTION TRUCK/PUMPS, SOIL EXCAVATION, ETC.)
    - C. RESIDUALS DISPOSAL (DRUMS TO DRMO, SOIL BIOREMEDIATION, ETC.)
    - D. AMOUNT OF HS RECOVERED (BARRELS/GALLONS/LITERS OR POUNDS/KILOGRAMS OF PURE PRODUCT)
    - E. RESPONSE/RECOVERY UNIT (TACTICAL UNIT, FIRE DEPT., ORSO, USGC, ETC.)
  12. ON-SCENE WEATHER/WIND (TEMPERATURE, HUMIDITY, WIND VELOCITY, VISIBILITY)
  13. AREAS THREATENED/DAMAGED (BEACH, WETLANDS, WATER INTAKE, AQUIFER, ETC.)
  14. POTENTIAL DANGERS (FIRE, EXPLOSION, TOXIC VAPOR, ETC.)
  15. REGULATORY ACTIVITY DURING INCIDENT (NAME, AGENCY OF OFFICIALS, DATE/TIME OF INSPECTION, AREAS INSPECTED)
  16. LESSONS LEARNED
  17. NOTIFICATIONS MADE (NRC, COAST GUARD MSO, EPA REGION, STATE, LOCAL AGENCY, ETC.)
  18. TELEPHONIC REPORT TO NRC WAS/WAS NOT MADE (NRC POC/REPORT NUMBER)
  19. POC FOR REPORT (PERSON, ACTIVITY/CODE, TELEPHONE [DSN AND COMMERCIAL])
  20. ASSISTANCE REQUIRED/COMMENTS
- //BT

REFERENCES

- (a) DOD Directive 4001.1, "Installation Management", September 4, 1986  
(Certified current as of November 24, 2003)
- (b) DOD Instruction 4715.6, "Environmental Compliance", April 24, 1996
- (c) Chapter 10 of DOD Regulation 4160.21-M "Defense Material Disposition  
Manual", August 18, 1997

APPENDIX K

IDENTIFICATION OF OTHER THAN OPERATIONAL (OTO) RANGES

5090

From: Commandant of the Marine Corps

Subj: Identification of Other than Operational (OTO) Ranges

Ref: (a) 10 U.S.C. §2710  
(b) 10 U.S.C. §101  
(c) DUSD Policy letter of December 18, 2003  
(d) MCO P5090.2A, Chapter 10

Encl: (1) Guidance for Closing Historical and Current Operational Ranges  
(2) OTO Range Process Flow Diagram  
(3) Example letters to be routed to HQMC LF via TECOM for MMRP closure or Administrative Closure  
(4) Definitions related to Operational and OTO ranges

This letter and its enclosures are provided as guidance for the identification of OTO range areas aboard Marine Corps installations that may be closed in accordance with applicable law (references (a) and (b)) and policy (reference (c)) without adversely affecting the Marine Corps training and readiness missions. If an installation's training mission changes over time, areas closed under this guidance may be re-opened for operational range activities.

Prior to 2001, the DOD responded to OTO ranges known or suspected to contain unexploded ordinance (UXO), DMM, or munitions constituents (MC) through the IR Program. In September 2001, DoD established the MMRP as a new DERP to better protect human health and the environment and to better communicate response requirements for OTO ranges known or suspected to contain UXO, DMM, or MC. To assist DoD in addressing munitions issues, Congress enacted 10 U.S.C. §2710 in the 2002 NDAA, directing DoD to develop an inventory of all OTO range sites known or suspected to contain UXO, DMM, or MC. Critical to fulfilling these requirements is the proper identification of operational ranges and, by default, OTO ranges. Definitions pertinent to the range inventory, operational ranges, and the MMRP are provided in references (a), (b), and (c).

This guidance will be incorporated into MCO P5090.2A.

The enclosed guidance should be implemented as an effort coordinated by installation's environmental office with the support and input of the O&T office.

A series of enclosures that support the guidance is provided. Enclosure 1 is the guidance policy. Enclosure 2 is a flow diagram of the process. Enclosure 3 provides an example template of the letter to be routed to MCICOM

(GF-5) via MCI Region and TECOM. Definitions of terms used in the guidance are provided in Enclosure 4.

The installation shall coordinate and submit a request for closure through the respective MCI Region to obtain concurrence from MCICOM (GF-5) & TECOM prior to closing the range area and putting the site to another use.

Enclosure 1:

**Subj: Guidance for Closing Historical and Current Operational Ranges**

The intent of the guidance provided by this letter and its enclosures is to identify all the installation OTO range areas to be closed in accordance with established regulations and guidance while not adversely affecting the training mission of the Marine Corps. Sites that have been put to an incompatible use must be examined to determine if eligible for the MMRP or administrative closure. Areas that have been closed, either historical or current operational ranges, will be identified as OTO ranges throughout the rest of this document.

The guidelines below define the process to close OTO range areas via the MMRP or administrative closure procedures. The installation environmental manager is responsible for initiating and leading this process for historical use areas or former range areas outside of the current operational inventory that have been put to a new use. If current operational range areas as defined in reference (b) are to be closed, the environmental manager will work with O&T. O&T will determine the eligibility of the identified area for closure.

Enclosure 2 is a flow diagram of the range closure process. The steps listed below correspond with the flow diagram and provide greater detail and clarification.

**OTO Range Identification**

**Step 1:** Identify operational range areas and OTO range areas by incorporating data from the installation Archive Search Report (ASR)/Preliminary Range Assessment (PRA) and current operational range boundary designations. Operational range areas, per reference (b), are active ranges or areas designated as range areas that could potentially be used for training. Examples of OTO range areas may include but are not limited to: former ranges, disposal areas, former training areas (and/or all locations that have historical documentation indicating the release of UXO or DMM; and current areas identified as incompatible use (e.g., residential buildings, utilities, daycare/schools, 24-hour access recreational areas, industrial complex, office buildings, etc.)).

**Step 2:** The OTO range areas are categorized into sites that are potentially eligible for the MMRP (site having known current and/or historical military munitions use) and those requiring only administrative closure (no documented munitions use). A site boundary should be established for any identified areas. The range designations identified in Enclosure 4 provide definitions to aid in identifying OTO range areas.

**Administrative Closure**

Identified OTO areas eligible for only administrative closure have had no known and/or documented military munitions use; and either no longer support operational range activities or are planned to support activities that are not compatible with range activities. Examples of such sites include parking lots, residential buildings, daycare/schools, non-live fire training areas, etc.

**MMRP Eligibility**

OTO areas eligible for the MMRP necessitate the initiation of the MMRP process. Such sites have current military munitions use, or are known to have historical military munitions use, resulting in a potential for UXO hazards or an explosive constituent release. The site must not be an operational range or within an operational range and cannot be a permitted disposal facility.

Maneuver areas aboard Marine Corps installations may be restricted to non-live fire activities; however, some maneuver areas are live fire ranges. For purposes of this document, all maneuver areas are considered operational range areas. These non-live fire maneuver areas may have been previously used for live fire activities; therefore, upon closing these areas, extensive research should occur to determine if they can be administratively closed or if they need to be added to the MMRP. The environmental office should work with the O&T office to identify any historic live fire ranges on operational ranges.

#### **Site Documentation**

**Step 3:** After identifying potential the sites for either MMRP or administrative closure, installation action proponent shall prepare site narratives and maps to support the recommendation. These documents must demonstrate the change in site status will not adversely impact the training mission of the installation. Site narratives must address the following elements:

- Facility name;
- Historical uses of the site (historical activities and dates of usage, munitions use<sup>1</sup> (type, dates of usage));
- Current use of the site (dates of current use type);
- Existing LUCs (engineering or institutional controls, or land use restrictions);
- Anticipated future site use (as documented in range use plans, if available, or other installation planning documents);
- Latitude and longitude;
- Total acreage of the area to be closed;
- Narrative indicating why the site is no longer considered operational range area; and
- Narrative indicating the new designation as OTO range area will not affect the identified training mission.

Create spatial data and maps in accordance with Marine Corps standards with support of installation GIS offices and O&T. Obtain the most recent operational range boundaries from the O&T office or the base GIS office. Site maps must include pertinent site information to allow decision-makers to make informed decisions regarding approval. Pertinent site information may include, but not limited to:

- Delineated boundaries for proposed OTO range area;
- Delineated historical ranges (with associated safety fans) and/or training area boundaries<sup>1</sup>;
- Delineated adjacent operational range boundaries;
- Current use structures; and
- Incompatible use areas.

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<sup>1</sup> MMRP Only

#### **Installation Concurrence**

**Step 4:** The installation O&T office must review and provide concurrence with the suggested OTO range areas. The environmental manager must coordinate with the O&T offices to address any comments or concerns. Identified site boundaries and/or site narratives may require modification based on these discussions.

#### **OTO Range Submittal and Approval**

**Step 5:** Upon O&T concurrence, a letter shall be drafted by the action proponent and contain the information contained in Step 3. Templates for sites closed under the MMRP or administrative closure are provided in Enclosure (3). This letter shall be authorized and signed by the installation's Commanding Officer or official as designated identifying the new OTO range areas and then routed to MCICOM (GF-) via MCI Region (as appropriate), and TECOM, in that order, for concurrence.

**Step 6:** Upon review and approval, the letter will be routed to the next chain of command, with MCICOM (GF-5) being the final approval authority.

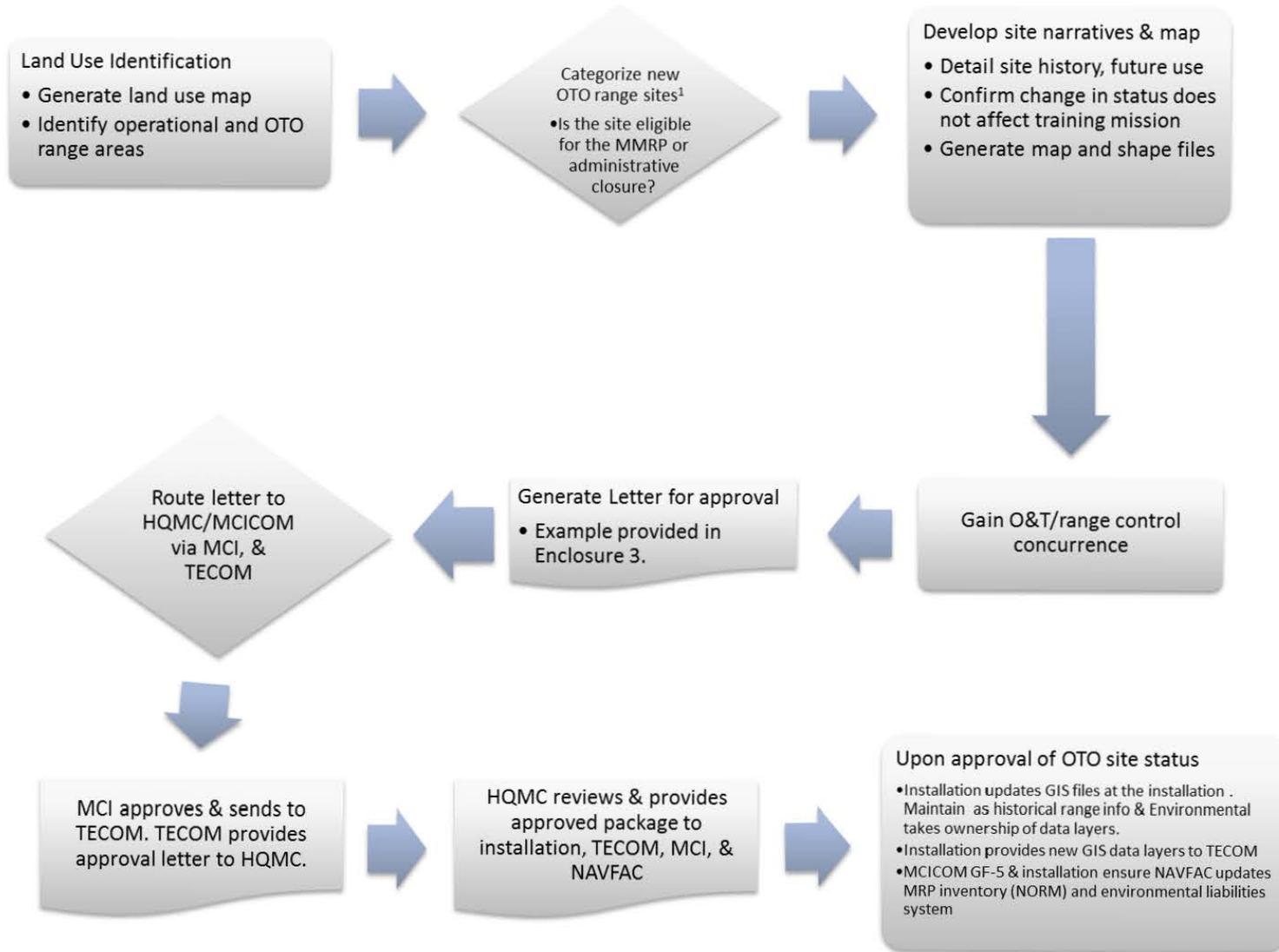
In the event that one of the Commands does not approve the proposed new site designations, a letter of non-approval will be sent to the installation and other Commands as appropriate. The letter shall contain detailed information on why the site closure was not approved. If the installation wishes to pursue the range closure, then it must address these concerns and reroute the letter as appropriate.

**Step 7:** Upon MCICOM (GF-5) concurrence, MCICOM (GF-5) submits a letter back to the installations, to include Commands letter of concurrence and original installation letter with a copy to MCI Region (as appropriate), TECOM, O&T, Environmental and NAVFAC.

**Step 8:** Upon total concurrence, for those OTO ranges eligible for the MMRP, MCICOM (GF-5) and the installation environmental manager shall ensure that NAVFAC updates the MMRP inventory, as well as the installation's environmental liabilities system. The installation GIS offices serve as the data manager and repository for the data layers. Installation O&T shall update the GIS data layers to reflect the change in the RTA from operational to OTO per the SOPs of the installation. TECOM shall ensure that the inventory is updated in the 366 Report to Congress; the inventory matches the installation's records. The OTO data layer shall then be maintained by the environmental office to include range acreage, usage, and any other pertinent data. The environmental office shall work with NAVFAC to ensure it has updated GIS information.

Enclosure 2

Subj: OTO Ranges Process Flow Diagram



K-6

Enclosure (1)

Enclosure 3:  
Subj: Example Letter



**UNITED STATES MARINE CORPS**

MARINE CORPS BASE  
PSC BOX 20004  
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

IN REPLY REFER TO:  
5090.21  
BEMD

From: Commanding Officer, [Installation Name]  
To: Commanding General, Marine Corps Installations Command  
(Code GF-5, Room 2D153A), 3000 Marine Corps Pentagon,  
Washington, DC 20350-3000  
  
Via: (1) Commanding General, MCI Region (as appropriate)  
(2) Commanding General, Training and Education Command,  
3300 Russell Road, Quantico, Virginia 22134  
  
Subj: PROPOSED MILITARY RANGE CLOSURE FOR [INSTALLATION NAME]  
  
Ref: (a) Headquarters Marine Corps (HQMC) Operational Range  
Closure Policy  
  
Encl: (1) [Proposed range closure area, e.g. Gun Positions 41A  
and 41B] Map Figure 1  
(2) [Proposed range closure area, e.g. Firing Position 2]  
Map Figure 2

1. Due to the location of three Gun Positions located within the boundaries of two Military Construction (MILCON) projects, the Environmental Management Division at [installation name] is submitting for closure under the Military Munitions Response Program approximately 6.0 acres of training area. The following applies:

a. Enclosure (1): Historic Gun Positions 41A and 41B located in the X training area total of approximately 3.0 acres. These two Gun Positions are required to be assessed (and remediated), if necessary for Unexploded Ordnance and/or Munitions Constituents before the planned Marine Special Operations Command (MARSOC) complex begins construction at the Base.

b. Enclosure (2): Historic Firing Position 2, approximately 3.0 acres, is located in the previously permitted area for the Base Municipal Solid Waste Landfill located off Green Road. This Firing Position was previously part of the Y training area before being transferred to the Base Public Works Division in 1995 for use as part of the existing landfill facility. This Subj: PROPOSED MILITARY RANGE CLOSURE FOR [INSTALLATION NAME]

firing Position is required to be assessed (and remediated), if

necessary for Unexploded Ordnance and/or Munitions Constituents before subsequent Phases of the landfill facility can begin construction.

2. All enclosures have been staffed through appropriate Base personnel (i.e. Training and Operations Department, Installations and Environment Department, etc.) for comments and all agree that these areas are no longer suitable for future use as range areas or gun positions. *[Installation Name]* therefore, requests that the Gun Positions submitted be considered for closure in accordance with the CERCLA process as indicated in range closure policy by HQMC and the Chief of Naval Operations.

3. It is requested that the Training and Education Command review and provide concurrence with these range closure proposals and notify MCICOM of your decision as required by reference (a).

4. If you have questions or comments, please contact *[Installation Environmental POC]*, Environmental Management Division, Installations and Environment Department, at *[phone number]*.

*[Name/Signature]*  
By direction

Copy to:  
MCICOM GF-5  
T&O



**UNITED STATES MARINE CORPS**

MARINE CORPS BASE  
PSC BOX 20004  
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

IN REPLY REFER TO:  
5090.21  
BEMD

From: Commanding Officer, *[Installation Name]*  
To: Commanding General, Marine Corps Installations Command  
(Code GF-5, Room 2D153A), 3000 Marine Corps Pentagon,  
Washington, DC 20350-3000

Via: (1) Commanding General, MCI Region (as appropriate)  
(2) Commanding General, Training and Education Command,  
3300 Russell Road, Quantico, Virginia 22134

Subj: PROPOSED OTHER THAN OPERATIONAL RANGE AREA *[INSTALLATION  
NAME]*

Ref: (a) Headquarters Marine Corps (HQMC) Operational Range  
Closure Policy

Encl: (1) *[Administrative closure area, e.g. Child development  
center]* Map Figure 1

1. Due to the location of the current Child Development Center located within the current operational range boundary, the Environmental Management Division at *[installation name]* is submitting for administrative closure of approximately 2.0 acres of operational range area. The following applies:

a. Enclosure (1): The CDC is located in the X training area total of approximately 2.0 acres. No use of military munitions have been documented at this location as it has historically been used as a child care facility since the establishment of *[installation name]*. (Additional details identified in the Range OTO Policy memo to include in the site narrative are as follows: historical uses of the site (historical activities and dates of usage, current use of the site (dates of current use type), existing land use controls (engineering or institutional controls, or land use restrictions), anticipated future site use (as documented in range use plans, if available, or other installation planning documents), latitude and longitude, total acreage of the area to be closed, narrative indicating why the site is no longer considered operational range area, and narrative indicating the new designation as OTO range area will not affect the identified training mission.)

2. All enclosures have been staffed through appropriate Base personnel (i.e. Training and Operations Department, Installations and Environment Department, etc.) for comments and all agree that these areas are no longer suitable for future use as range areas or gun positions. *[Installation Name]* therefore, requests that the area submitted be considered for closure as indicated in range closure policy by HQMC and the Chief of Naval Operations.

3. It is requested that the Training and Education Command review and provide concurrence with these range closure proposals and notify MCICOM of your decision as required by reference (a).

4. If you have questions or comments, please contact *[Installation Environmental POC]*, Environmental Management Division, Installations and Environment Department, at *[phone number]*.

*[Name/Signature]*  
By direction

Copy to:  
MCICOM GF-5  
T&O

Enclosure 4:

**Subj: Definitions related to Operational and OTO ranges**

- (1) Range: The term "range", when used in a geographic sense, means a designated land or water area that is set aside, managed, and used for range activities of the DoD. The term includes firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas. The term also includes air-space areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the FAA (10 USC 101 (e)(1)(A) and (B)).
- (2) Operational range: A range that is under the jurisdiction, custody, or control of the SECDEF and that is used for range activities; or although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities (10 USC 101(e)(3)(A) and (B)).
- (3) OTO range: A range that is under the jurisdiction, custody, or control of the SECDEF and is no longer used for range activities; no longer considered by the Secretary to be an operational range; or has been put to new use that is incompatible with range activities
- (4) MMRP Eligibility: A release of UXO, DMM, or MC has occurred (the revised DoD guidance for DERP eligibility has lifted the year requirement that the release must have occurred prior to Sept 2002), the site is not operational, the site is not a permitted disposal facility.
- (5) Administrative Closure Eligibility: documented no known munitions use and site has been or is planned to be developed or put to a new use (e.g. building already built, parking lot, etc.)
- (6) Historical Use Area: A historically used range area that lies within Title 10 designated operational range boundaries. The range area is no longer used for the historical use purpose.

APPENDIX L

REQUEST FOR ENVIRONMENTAL IMPACT REVIEW (REIR)

NEPA requirements apply to proposed Federal actions that have potential to impact the human environment (i.e., those which may result in a change to the physical environment; social and economic impacts alone are not sufficient to trigger actions per reference (a)). To ensure installation environmental planning staff coordinate on actions with the potential to impact the human environment, Action Proponents shall submit a completed REIR form, NAVMC 11601 (10-07) (EF) available electronically at <http://192.156.19.102/ar/mcefs.nsf/welcome?opennavigator>) to the installation's environmental planning staff, for all proposed actions that have potential to impact the human environment. The REIR shall be a form prescribed by the CG/CO exercising a FNSI signature authority, and should contain enough information to support the use of a CATEX (in case a CATEX applies). The commander exercising FNSI signature authority may delegate REIR signature authority to qualified environmental planning staff.

Print Form

REQUEST FOR ENVIRONMENTAL IMPACT REVIEW			Report Control Number RCN:				
INSTRUCTIONS: Section 1 to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).							
<b>SECTION I - PROPONENT INFORMATION</b>							
1. TO (Environmental Planning Function)		2. FROM (Proponent organization and functional address symbol)		2a. TELEPHONE NO.			
3. TITLE OF PROPOSED ACTION							
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)							
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)							
6. PROPONENT APPROVAL (Name and Grade)		6a. SIGNATURE			6b. DATE		
<b>SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY.</b> (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; O = no effect; - = adverse effect; U = unknown effect)				+	O	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. WATER RESOURCES (Quality, quantity, source, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. OTHER (Potential impacts not addressed above.)				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION</b>							
17. <input type="checkbox"/> PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) – Decision Memorandum (DM) # _____; OR				<input type="checkbox"/> PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.			
18. REMARKS							
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)		19a. SIGNATURE			19b. DATE		
20. PROPONENT APPROVAL (Name and Grade) OF SECTION III		20a. SIGNATURE			20b. DATE		

Reset Form

REQUEST FOR ENVIRONMENTAL REVIEW IMPACT CONTINUATION SHEET
<h1>SAMPLE</h1>

Reset Form

REFERENCES

(a) 42 U.S.C. 4321-4347

APPENDIX M

EXCERPT FROM DEPARTMENT OF DEFENSE DIRECTIVE 6050.7  
ENVIRONMENTAL EFFECTS ABROAD OF MAJOR DEPARTMENT OF DEFENSE ACTIONS

NUMBER 6050.7

March 31, 1979

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ASD(MRA&L)

SUBJECT: Environmental Effects Abroad of Major Department  
of Defense Actions

Reference: (a) Executive Order (E.O.) 12114, "Environmental Effects Abroad  
of Major Federal Actions," dated January 4, 1979

1. PURPOSE. E.O. 12114 provides the exclusive and complete requirement for taking account of considerations with respect to actions that do significant harm to the environment of places outside the United States. This directive provides policy and procedures to enable Department of Defense (DOD) officials to be informed and take account of environmental considerations when authorizing or approving certain major Federal actions that do significant harm to the environment of places outside the United States. Its sole objective is to establish internal procedures to achieve this purpose, and nothing in it shall be construed to create a cause of action. Guidance for taking account of considerations with respect to the environment of places within the United States is set out in DoD Directive 6050.1. That guidance is grounded on legal and policy requirements different from those applicable to this directive.

2. APPLICABILITY. The provisions of this directive apply to OSD, the military departments, the Organization of the Joint Chiefs of Staff, the Unified and Specified Commands, and the Defense Agencies (hereafter referred to as "DoD components").

3. DEFINITIONS

3.1. Environment means the natural and physical environment, and it excludes social, economic, and other environments. Social and economic effects do not give rise to any requirements under this directive.

3.2. Federal Action means an action that is implemented or funded directly by the United States Government. It does not include actions in which the United States participates in an advisory, information-gathering, representational, or diplomatic capacity but does not implement or fund the action; actions taken by a foreign government or in a foreign country in which the United States is a beneficiary of the action, but does not implement or fund the action; or actions in which foreign governments use funds derived indirectly from United States funding.

3.3. Foreign Nation means any geographic area (land, water, and airspace) that is under the jurisdiction of one or more foreign governments;

any area under military occupation by the United States alone or jointly with any other foreign government; and any area that is the responsibility of an international organization of governments. "Foreign nation" includes contiguous zones and fisheries zones of foreign nations. "Foreign government" in this context includes governments regardless of whether recognized by the United States, political factions, and organizations that exercise governmental power outside the United States.

3.4. Global Commons are geographical areas that are outside the jurisdiction of any nation, and include the oceans outside territorial limits and Antarctica. Global commons do not include contiguous zones and fisheries zones of foreign nations.

3.5. Major Action means an action of considerable importance involving substantial expenditures of time, money, and resources, that affects the environment on a large geographic scale or has substantial environmental effects on a more limited geographical area, and that is substantially different or a significant departure from other actions, previously analyzed with respect to environmental considerations and approved, with which the action under consideration may be associated. Deployment of ships, aircraft, or other mobile military equipment is not a major action for purposes of this directive.

3.6. United States means all states, territories, and possessions of the United States; and all waters and airspace subject to the territorial jurisdiction of the United States. The territories and possessions of the United States include the Virgin Islands, American Samoa, Wake Island, Midway Island, Guam, Palmyra Island, Johnston Atoll, Navassa Island, and Kingman Reef.

#### 4. POLICY

4.1. E.O. 12114 is based on the authority vested in the President by the Constitution and the laws of the United States. The objective of the Order is to further foreign policy and national security interests while at the same time taking into consideration important environmental concerns.

4.2. The DOD acts with care in the global commons because the stewardship of these areas is shared by all the nations of the world. The DOD will take account of environmental considerations when it acts in the global commons in accordance with procedures set out in enclosure 1 and its attachment.

4.3. The DOD also acts with care within the jurisdiction of a foreign nation. Treaty obligations and the sovereignty of other nations must be respected, and restraint must be exercised in applying United States laws within foreign nations unless Congress has expressly provided otherwise. The DOD will take account of environmental considerations in accordance with enclosure 2 and its attachments when it acts in a foreign nation.

4.4. Foreign policy considerations require coordination with the Department of State on communications with foreign governments concerning environmental agreements and other formal arrangements with foreign

governments concerning environmental matters under this directive. Informal working-level communications and arrangements are not included in this coordination requirement. Consultation with the Department of State also is required in connection with the utilization of additional exemptions from this directive as specified in paragraph E2.3.3.2. of enclosure 2. Coordination and consultation with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

4.5. E.O. 12114, implemented by this directive, prescribes the exclusive and complete procedural measures and other actions to be taken by the DOD to further the purpose of the NEPA with respect to the environment outside the United States.

## 5. RESPONSIBILITIES

5.1. The Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) shall:

5.1.1. Serve as the responsible DOD official for policy matters under E.O. 12114 and this directive;

5.1.2. Modify or supplement any of the enclosures to this directive in a manner consistent with the policies set forth in this directive;

5.1.3. Maintain liaison with the CEQ with respect to environmental documents;

5.1.4. Participate in determining whether a recommendation should be made to the President that a natural or ecological resource of global importance be designated for protection; and

5.1.5. Consult with the Assistant Secretary of Defense (International Security Affairs) on significant or sensitive actions or decisions affecting relations with another nation.

5.2. The Assistant Secretary of Defense (International Security Affairs) shall:

5.2.1. Maintain liaison and conduct consultations with the Department of State as required under this directive;

5.2.2. Serve as the responsible official, in consultation with the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), for monitoring the continuing cooperation and the exchange of information with other nations concerning the environment; and

5.3. The General Counsel, DOD, shall provide advice and assistance concerning the requirements of E.O. 12114 and this directive.

5.4. The Secretaries of the Military Departments, Directors of the Defense Agencies, and Commanders of the Unified and Specified Commands, for operations under their jurisdiction, shall:

5.4.1. Prepare and consider environmental documents when required by this directive for proposed actions within their respective DoD component (this reporting requirement has been assigned Report Control Symbol DD-M(AR) 1327 (section 6.));

5.4.2. Insure that regulations and other major policy issuances are reviewed for consistency with E.O. 12114 and this directive;

5.4.3. Designate a single POC for matters pertaining to this directive;  
and

5.4.4. Consult with the Assistant Secretary of Defense (International Security Affairs) on significant or sensitive actions or decisions affecting relations with another nation.

## 6. INFORMATION REQUIREMENTS

The documents to be prepared under subsection 5.4. and enclosures 1 and 2 are assigned Report Control Symbol DD-M(AR) 1327 (formerly DD-H&E(AR) 1327).

## 7. EFFECTIVE DATE AND IMPLEMENTATION

This directive is effective immediately. Forward two copies of implementing documents to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) within 90 days.

Enclosures - 3

1. Requirements for Environmental Considerations Global- Commons
2. Requirements for Environmental Considerations-Foreign Nations and Protected Global Resources
3. References

E1. ENCLOSURE 1

REQUIREMENTS FOR ENVIRONMENTAL CONSIDERATIONS-  
GLOBAL COMMONS

E1.1. GENERAL

This enclosure implements the requirements of E.O. 12114 with respect to major DOD actions that do significant harm to the environment of the global commons. The focus is not the place of the action, but the location of the environment with respect to which there is significant harm. The actions prescribed by this enclosure are the exclusive and complete requirement for taking account of environmental considerations with respect to DOD Defense activities that affect the global commons.

E1.2. ACTIONS INCLUDED

The requirements of this enclosure apply only to major Federal actions that do significant harm to the environment of the global commons.

E1.3. ENVIRONMENTAL DOCUMENT REQUIREMENTS

E1.3.1. General. When an action is determined to be a major Federal action that significantly harms the environment of the global commons, an EIS, as described below, will be prepared to enable the responsible decision-making official to be informed of pertinent environmental considerations. The statement may be a specific statement for the particular action, a generic statement covering the entire class of similar actions, or a program statement.

E1.3.2. Limitations on Actions. Until the requirements of this enclosure have been met with respect to actions involving the global commons, no action concerning the proposal may be taken that does significant harm to the environment or limits the choice of reasonable alternatives.

E1.3.3. Emergencies. Where emergency circumstances make it necessary to take an action that does significant harm to the environment without meeting the requirements of this enclosure, the DOD component concerned shall consult with the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics). This includes actions that must be taken to promote the national defense or security and that cannot be delayed, and actions necessary for the protection of life or property.

E1.3.4. Combining Documents. Environmental documents may be combined with other agency documents to reduce duplication. If an EIS for a particular action already exists, regardless of what Federal agency prepared it, no new statement is required by this directive.

E1.3.5. Collective Statements. Consideration should be given to the use of generic and program statements. Generic statements may include actions with relevant similarities such as common timing, environmental effects, alternatives, methods of implementation, or subject matter.

E1.3.6. Tiering. Consideration should be given to tiering of EISs to eliminate repetitive discussions of the same issue and to focus the issues. Tiering refers to the coverage of general matters in broader EISs, with succeeding narrower statements or environmental analyses that incorporate by reference the general discussion and concentrate only on the issues specific to the statement subsequently prepared.

E1.3.7. Lead Agency. When one or more other Federal agencies are involved with the DOD in an action or program, a lead agency may be designated to supervise the preparation of the EIS. In appropriate cases, more than one agency may act as joint lead agencies. The following factors should be considered in making the lead agency designation:

E1.3.7.1. The magnitude of agency involvement;

E1.3.7.2. Which agency or agencies have project approval and disapproval authority;

E1.3.7.3. The expert capabilities concerning the environmental effects of the action;

E1.3.7.4. The duration of agency involvement; and

E1.3.7.5. The sequence of agency involvement.

E1.3.8. CATEX. The DOD may provide a CATEX for actions that normally do not, individually or cumulatively, do significant harm to the environment. If an action is covered by a CATEX no EA or EIS is required. CATEXs will be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) and will be identified in Attachment 1 to this enclosure. DoD components identifying recurring actions that have been determined, after analysis, not to do significant harm to the environment should submit recommendations for CATEXs and accompanying justification to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E1.3.9. EAs. The purpose of an EA is to assist DoD components in determining whether an EIS is required for a particular action. The assessment should be brief and concise but should include sufficient information on which a determination can be made whether the proposed action is major and Federal, and whether it significantly harms the environment of the global commons. As a minimum, the EA should include consideration of the need for the proposed action and the environmental effect of the proposed action. The EA will be made available to the public in the United States upon request, but there is no requirement that it be distributed for public comment.

#### E1.4. ENVIRONMENTAL IMPACT STATEMENTS

E1.4.1. General. EISs will be concise and no longer than necessary to permit an informed consideration of the environmental effects of the proposed action on the global commons and the reasonable alternatives. If an action requiring an EIS also has effects on the environment of a foreign nation or on a resource designated as one of global importance, the statement need not consider or be prepared with respect to these effects. The procedures for

considering these effects are set out in enclosure 2.

E1.4.2. Draft Statement. EISs will be prepared in two stages and may be supplemented. The first, or draft statement, should be sufficiently complete to permit meaningful analysis and comment. The draft statement will be made available to the public, in the United States, for comment. The Department of State, the CEQ, and other interested Federal agencies will be informed of the availability of the draft statement and will be afforded an opportunity to comment. Contacts with foreign governments are discussed in subsection 4.4. of the directive and subsection E1.4.11. of this enclosure.

E1.4.3. Final Statement. Final statements will consider, either individually or collectively, substantive comments received on the draft statement. The final statement will be made available to the public in the United States.

E1.4.4. Supplemental Statement. Supplements to the draft or final statement should be used when substantial changes to the proposed action are made relative to the environment of the global commons or when significant new information or circumstances, relevant to environmental concerns bear on the proposed action or its environmental effects on the global commons. Supplemental statements will be circulated for comment as in subsection E1.4.2. above unless alternative procedures are approved by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E1.4.5. Statement Content. The statement will include: a section on consideration of the purpose of and need for the proposed action; a section on the environmental consequences of the proposed action and reasonable alternatives; a section that provides a succinct description of the environment of the global commons affected by the proposed action and reasonable alternatives; and a section that analyzes, in comparative form, the environmental effects on the global commons of the proposed action and reasonable alternatives.

E1.4.6. Incomplete Information. The statement should indicate when relevant information is missing due to unavailability or scientific uncertainty.

E1.4.7. Hearings. Public hearings are not required. Consideration should be given in appropriate cases to holding or sponsoring public hearings. Factors in this consideration include: foreign relations sensitivities; whether the hearings would be an infringement or create the appearance of infringement on the sovereign responsibilities of another government; requirements of domestic and foreign governmental confidentiality; requirements of national security; whether meaningful information could be obtained through hearings; time considerations; and requirements for commercial confidentiality. There is no requirement that all factors listed in this section be considered when one or more factors indicate that public hearings would not produce a substantial net benefit to those responsible for authorizing or approving the proposed action.

E1.4.8. Decision. Relevant environmental documents developed in accordance with this enclosure will accompany the proposal for action through the review process to enable officials responsible for authorizing or

approving the proposed action to be informed and to take account of environmental considerations. One means of making an appropriate record with respect to this requirement is for the decision-maker to sign and date a copy of the EIS, indicating that it has been considered in the decision-making process. Other means of making an appropriate record are also acceptable.

E1.4.9. Timing. No decision on the proposed action may be made until the later of 90 days after the draft statement has been made available and notice thereof published in the Federal Register, or 30 days after the final statement has been made available and notice thereof published in the Federal Register. The 90-day period and the 30-day period may run concurrently. Not less than 45 days may be allowed for public comment. The Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) may, upon a showing of probable important adverse effect on national security or foreign policy, reduce the 30-day, 45-day, and 90-day periods.

E1.4.10. Classified Information. EAs and EISs that address classified proposals will be safeguarded and classified information will be restricted from public dissemination in accordance with DOD procedures (DoD Directive 5200.1) established for such information under E.O. 12065. The requirements of that E.O. take precedence over any requirement of disclosure in this directive. Only unclassified portions of environmental documents may be disseminated to the public.

E1.4.11. Foreign Governments. Consideration will be given to whether any foreign government should be informed of the availability of environmental documents. Communications with foreign governments concerning environmental agreements and other formal arrangements with foreign governments concerning environmental matters under this directive will be coordinated with the Department of State. Informal, working-level communications and arrangements are not included in this coordination requirement. Coordination with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

Attachments - 1

1. Report Control Symbol DD-M(AR) 1327, Categorical Exclusions - Global Commons

E1.A1. ENCLOSURE 1 ATTACHMENT 1

REPORT CONTROL SYMBOL DD-M(AR) 1327

CATEGORICAL EXCLUSIONS--GLOBAL COMMONS

E2. ENCLOSURE 2

REQUIREMENTS FOR ENVIRONMENTAL CONSIDERATIONS-  
FOREIGN NATIONS AND PROTECTED GLOBAL RESOURCES

E2.1. GENERAL

This enclosure implements the requirements of E.O. 12114 to provide for procedural and other actions to be taken to enable officials to be informed of pertinent environmental considerations when authorizing or approving certain major DOD actions that do significant harm to the environment of a foreign nation or to a protected global resource.

E2.2. ACTIONS INCLUDED

E2.2.1. The requirements of this enclosure apply only to the following actions:

E2.2.1.1. Major Federal actions that significantly harm the environment of a foreign nation that is not involved in the action. The involvement of the foreign nation may be directly by participation with the United States in the action, or it may be in conjunction with another participating nation. The focus of this category is on the geographical location of the environmental harm and not on the location of the action.

E2.2.1.2. Major Federal actions that are determined to do significant harm to the environment of a foreign nation because they provide to that nation: (1) a product, or involve a physical project that produces a principal product, emission, or effluent, that is prohibited or strictly regulated by Federal law in the United States because its toxic effects on the environment create a serious public health risk; or (2) a physical project that is prohibited or strictly regulated in the United States by Federal law to protect the environment against radioactive substances. Included in the category of "prohibited or strictly regulated" are the following: asbestos, vinyl chloride, acrylonitrile, isocyanates, PCBs, mercury, beryllium, arsenic, cadmium, and benzene.

E2.2.1.3. Major Federal actions outside the United States that significantly harm natural or ecological resources of global importance designated for protection by the President or, in the case of such a resource protected by international agreement binding on the United States, designated for protection by the Secretary of State. Such determinations by the President or the Secretary of State are listed in Attachment 1 to this enclosure.

E2.2.2. The actions prescribed by this enclosure are the exclusive and complete requirement for taking account of environmental considerations with respect to Federal actions that do significant harm to the environment of foreign nations and protected global resources as described in subsection E2.2.1. above. No action is required under this enclosure with respect to Federal actions that affect only the environment of a participating or otherwise involved foreign nation and that do not involve providing products or physical projects producing principal products, emissions, or effluents

that are prohibited or strictly regulated by Federal law in the United States, or resources of global importance that have been designated for protection.

E2.3. ENVIRONMENTAL DOCUMENT REQUIREMENTS

E2.3.1. General

E2.3.1.1. There are two types of environmental documents that officials shall use in taking account of environmental considerations for actions covered by this enclosure:

E2.3.1.1.1. Environmental studies--bilateral or multilateral environmental studies, relevant or related to the proposed action, by the United States and one or more foreign nations or by an international body or organization in which the United States is a member or participant; and

E2.3.1.1.2. Environmental reviews--concise reviews of the environmental issues involved that are prepared unilaterally by the United States.

E2.3.1.2. This section identifies the procedures for the preparation of environmental studies or reviews when required by this enclosure and the exceptions from the requirement to prepare environmental studies or reviews. If an environmental document already exists for a particular action, regardless of what Federal agency prepared it, no new document is required by this enclosure.

E2.3.2. Lead Agency. When one or more other Federal agencies are involved with the DOD in an action or program, a lead agency may be designated to supervise the preparation of environmental documentation. In appropriate cases, more than one agency may act as joint lead agencies. The following factors should be considered in making the lead agency designation:

E2.3.2.1. The magnitude of agency involvement;

E2.3.2.2. Which agency or agencies have project approval and disapproval authority;

E2.3.2.3. The expert capabilities concerning the environmental effects of the action;

E2.3.2.4. The duration of agency involvement; and

E2.3.2.5. The sequence of agency involvement.

E2.3.3. Exemptions. There are general exemptions from the requirements of this enclosure provided by E.O. 12114, and the SECDEF has the authority to approve additional exemptions.

E2.3.3.1. General Exemptions. The following actions are exempt from the procedural and other requirements of this enclosure under general exemptions established for all agencies by E.O. 12114:

E2.3.3.1.1. Actions that the DoD component concerned determines do not do

significant harm to the environment outside the United States or to a designated resource of global importance.

E2.3.3.1.2. Actions taken by the President. These include: signing bills into law; signing treaties and other international agreements; the promulgation of E.O.s; Presidential proclamations; and the issuance of Presidential decisions, instructions, and memoranda. This includes actions taken within the DOD to prepare or assist in preparing recommendations, advice, or information for the President in connection with one of these actions by the President. It does not include actions taken within the DOD to implement or carry out these instruments and issuances after they are promulgated by the President.

E2.3.3.1.3. Actions taken by or pursuant to the direction of the President or a cabinet officer in the course of armed conflict. The term "armed conflict" refers to: hostilities for which Congress has declared war or enacted a specific authorization for the use of armed forces; hostilities or situations for which a report is prescribed by section 4(a) (1) of the War Powers Resolution, 50 U.S.C.A. § 1543(a) (1) (Supp. 1978); and other actions by the armed forces that involve defensive use or introduction of weapons in situations where hostilities occur or are expected. This exemption applies as long as the armed conflict continues.

E2.3.3.1.4. Actions taken by or pursuant to the direction of the President or a cabinet officer when the national security or national interest is involved. The determination that the national security or national interest is involved in actions by the DOD must be made in writing by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

E2.3.3.1.5. The activities of the intelligence components utilized by the Secretary of Defense under E.O. 12036, 43 Fed. Reg. 3674 (1978). These components include the Defense Intelligence Agency, the National Security Agency, the offices for the collection of specialized intelligence through reconnaissance programs, the Army Office of the Assistant Chief of Staff for Intelligence, the Office of Naval Intelligence, and the Air Force Office of the Assistant Chief of Staff for Intelligence.

E2.3.3.1.6. The decisions and actions of the Office of the Assistant Secretary of Defense (International Security Affairs), the Defense Security Assistance Agency, and the other responsible offices within DOD component with respect to arms transfers to foreign nations. The term "arms transfers" includes the grant, loan, lease, exchange, or sale of defense articles or defense services to foreign governments or international organizations, and the extension or guarantee of credit in connection with these transactions.

E2.3.3.1.7. Votes and other actions in international conferences and organizations. This includes all decisions and actions of the United States with respect to representation of its interests at international organizations, and at multilateral conferences, negotiations, and meetings.

E2.3.3.1.8. Disaster and emergency relief actions.

E2.3.3.1.9. Actions involving export licenses, export permits, or export

approvals, other than those relating to nuclear activities. This includes: advice provided by DoD components to the Department of State with respect to the issuance of munitions export licenses under section 38 of the Arms Export Control Act, 22 U.S.C. § 2778 (1976); advice provided by DoD components to the Department of Commerce with respect to the granting of export licenses under the Export Administration Act of 1969, 50 U.S.C. App. §§ 2401-2413 (1970 & Supp. V 1975); and direct exports by the DOD of defense articles and services to foreign governments and international organizations that are exempt from munitions export licenses under section 38 of the Arms Export Control Act, 22 U.S.C. § 2778 (1976). The term "export approvals" does not mean or include direct loans to finance exports.

E2.3.3.1.10. Actions relating to nuclear activities and nuclear material, except actions providing to a foreign nation a nuclear production or utilization facility, as defined in the AEA of 1954, as amended, or a nuclear waste management facility.

E2.3.3.2. Additional Exemptions. The DOD is authorized under E.O. 12114 to establish additional exemptions that apply only to the department's operations. There are two types of additional exemptions: case-by-case and class.

E2.3.3.2.1. Case by-Case Exemptions. Exemptions other than those specified above may be required because emergencies, national security considerations, exceptional foreign policy requirements, or other special circumstances preclude or are inconsistent with the preparation of environmental documentation and the taking of other actions prescribed by this enclosure. The following procedures apply for approving these exemptions:

E2.3.3.2.1.1. Emergencies. This category includes actions that must be taken to promote the national defense or security and that cannot be delayed, and actions necessary for the protection of life or property. The heads of the DoD components are authorized to approve emergency exemptions on a case-by-case basis. The DOD is required to consult as soon as feasible with the Department of State and the CEQ with respect to emergency exemptions. The requirement to consult as soon as feasible is not a requirement of prior consultation. A report of the emergency action will be made by the DoD component head to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), who, with the Assistant Secretary of Defense (International Security Affairs), shall undertake the necessary consultations.

E2.3.3.2.1.2. Other Circumstances. National security considerations, exceptional foreign policy requirements, and other special circumstances not identified in paragraph E2.3.3.1. above, may preclude or be inconsistent with the preparation of environmental documentation. In these circumstances, the head of the DoD component concerned is authorized to exempt a particular action from the environmental documentation requirements of this enclosure after obtaining the prior approval of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), who, with the Assistant Secretary of Defense (International Security Affairs), shall consult, before approving the exemption, with the Department of State and the CEQ. The requirement for prior consultation is not a requirement for prior approval.

E2.3.3.2.2. Class Exemptions. Circumstances may exist where a class exemption for a group of related actions is more appropriate than a specific exemption. Class exemptions may be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) who, with the Assistant Secretary of Defense (International Security Affairs), shall consult, before approving the exemption, with the Department of State and the CEQ. The requirement for prior consultation is not a requirement for prior approval. Requests for class exemptions will be submitted by the head of the DoD component concerned to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) after coordination with other interested DoD components. Notice of the establishment of a class exemption will be issued as Attachment 2 to this enclosure.

E2.3.4. CATEXs. The DOD is authorized by E.O. 12114 to provide for CATEXs. A CATEX is a category of actions that normally do not, individually or cumulatively, do significant harm to the environment. If an action is covered by a CATEX, no environmental document is required. CATEXs will be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), and will be identified in Attachment 3 to this enclosure. DoD components identifying recurring actions that have been determined, after analysis, not to do significant harm to the environment should submit requests for CATEXs and accompanying justification to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

#### E2.4. ENVIRONMENTAL STUDIES

E2.4.1. General. Environmental studies are one of two alternative types of documents to be used for actions described by paragraph E2.2. of this enclosure.

E2.4.1.1. An environmental study is an analysis of the likely environmental consequences of the action that is to be considered by DoD components in the decision-making process. It includes a review of the affected environment, significant actions taken to avoid environmental harm or otherwise to better the environment, and significant environmental considerations and actions by the other participating nations, bodies, or organizations.

E2.4.1.2. An environmental study is a cooperative action and not a unilateral action undertaken by the United States. It may be bilateral or multilateral, and it is prepared by the United States in conjunction with one or more foreign nations, or by an international body or organization in which the United States is a member or participant. The environmental study, because it is prepared as a cooperative undertaking, may be best suited for use with respect to actions that provide strictly regulated or prohibited products or projects to a foreign nation (E2.2.1.2.) and actions that affect a protected global resource (E2.2.1.3.).

E2.4.2. Department of State Coordination. Communications with foreign governments concerning environmental studies and other formal arrangements with foreign governments concerning environmental matters under this directive will be coordinated with the Department of State. Informal, working-level communications and arrangements are not included in this coordination

requirement. Coordination with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

E2.4.3. Whether to Prepare an Environmental Study. The judgment whether the action is one that would do significant harm to one of the environments covered by this enclosure normally will be made in consultation with concerned foreign governments or organizations. If a negative decision is made, the file will be documented with a record of that decision and the decision-makers who participated. If a decision is made to prepare a study then, except as provided by this enclosure, no action concerning the proposal may be taken that would do significant harm to the environment until the study has been completed and the results considered.

E2.4.4. Content of the Study. The document is a study of the environmental aspects of the proposed action to be considered in the decision-making process. The precise content of each study must be flexible because of such considerations as the sensitivity of obtaining information from foreign governments, the availability of useful and understandable information, and other factors identified under "Limitations" (subsection E2.4.6. below). The study should, however, include consideration of the following:

E2.4.4.1. A general review of the affected environment;

E2.4.4.2. The predicted effect of the action on the environment;

E2.4.4.3. Significant known actions taken by governmental entities with respect to the proposed action to protect or improve the environment; and

E2.4.4.4. If no actions are being taken to protect or enhance the environment, whether the decision not to do so was made by the affected foreign government or international organization.

E2.4.5. Distribution of the Study. Except as provided under "Limitations" (subsection E2.4.6., below), and except where classified information is involved, environmental studies will be made available to the Department of State, the CEQ, other interested Federal agencies, and, on request, to the public in the United States. Interested foreign governments also may be informed of the studies, subject to the "Limitations" (subsection E2.4.6., below) and controls on classified information, and furnished copies of the documents. No distribution is required prior to the preparation of the final version of the study or prior to taking the action that caused the study to be prepared.

E2.4.6. Limitations. The requirements with respect to the preparation, content, and distribution of environmental studies in the international context must remain flexible. The specific procedures must be determined on a case-by-case basis and may be modified where necessary to:

E2.4.6.1. Enable the component to act promptly. Considerations such as national security and foreign government involvement may require prompt action that must take precedence in the environmental review process;

E2.4.6.2. Avoid adverse impacts on relations between the United States

and foreign governments and international organizations;

E2.4.6.3. Avoid infringement or the appearance of infringement on the sovereign responsibilities of another government. The collection of information and the preparation and distribution of environmental documentation for actions in which another nation is involved, or with respect to the environment and resources of another nation, unless done with proper regard to the sovereign authority of that nation, may be viewed by that nation as an interference in its internal affairs and its responsibility to evaluate requirements with respect to the environment;

E2.4.6.4. Ensure consideration of:

E2.4.6.4.1. Requirements of governmental confidentiality.

This refers to the need to protect sensitive foreign affairs information and information received from another government with the understanding that it will be protected from disclosure regardless of its classification;

E2.4.6.4.2. National security requirements. This refers to the protection of classified information and other national security interests;

E2.4.6.4.3. Availability of meaningful information. Information on the environment of foreign nations may be unavailable, incomplete, or not susceptible to meaningful evaluation, particularly where the affected foreign nation is not a participant in the analysis. This may reduce or change substantially the normal content of the environmental study;

E2.4.6.4.4. The extent of the participation of the DoD component concerned and its ability to affect the decision made. The utility of the environmental analysis and the need for an in-depth review diminishes as DoD's role and control over the decision lessens; and

E2.4.6.4.5. International commercial, commercial confidentiality, competitive, and export promotion factors. This refers to the requirement to protect domestic and foreign trade secrets and confidential business information from disclosure. Export promotion factors includes the concept of not unnecessarily hindering United States exports.

E2.4.7. Classified Information. Classified information will be safeguarded from disclosure in accordance with the DOD procedures (DOD Directive 5200.1) established for such information under E.O. 12065. The requirements of that E.O take precedence over any requirement of disclosure in this directive.

## E2.5. ENVIRONMENTAL REVIEWS

E2.5.1. General. Environmental reviews are the second of the two alternative types of documents to be used for actions covered by paragraph B of this enclosure.

E2.5.1.1. An environmental review is a survey of the important environmental issues involved. It includes identification of these issues and a review of what if any consideration has been or can be given to the

environmental aspects by the United States and by any foreign government involved in taking the action.

E2.5.1.2. An environmental review is prepared by the DoD component concerned either unilaterally or in conjunction with another Federal agency. While an environmental review may be used for any of the actions identified by section E2.2., it may be uniquely suitable, because it is prepared unilaterally by the United States, to actions that affect the environment of a nation not involved in the undertaking (E2.2.1.1.).

E2.5.2. Department of State Coordination. Communications with foreign governments concerning environmental agreements and other formal arrangements with foreign governments concerning environmental matters under this enclosure will be coordinated with the Department of State. Informal, working-level communications and arrangements are not included in this coordination requirement. Coordination with the Department of State will be through the Assistant Secretary of Defense (International Security Affairs).

E2.5.3. Whether to Prepare an Environmental Review. Sufficient information will be gathered, to the extent it is reasonably available, to permit an informed judgment as to whether the proposed action would do significant harm to the environments covered by this enclosure. If a negative decision is made, a record will be made of that decision and its basis. If a decision is made to prepare a review, then, except as provided by this enclosure, no action concerning the proposal may be taken that would do significant environmental harm until the review has been completed.

E2.5.4. Content of the Review. An environmental review is a survey of the important environmental issues associated with the proposed action that is to be considered by the DoD component concerned in the decision-making process. It does not include all possible environmental issues and it does not include the detailed evaluation required in an EIS under enclosure 1 of this directive. There is no foreign government or international organization participation in its preparation, and the content therefore may be circumscribed because of the availability of information and because of foreign relations sensitivities. Other factors affecting the content are identified under "Limitations" (subsection E2.5.6. below). To the extent reasonably practical the review should include consideration of the following:

E2.5.4.1. A statement of the action to be taken including its timetable, physical features, general operating plan, and other similar broad-gauge descriptive factors;

E2.5.4.2. Identification of the important environmental issues involved;

E2.5.4.3. The aspects of the actions taken or to be taken by the DoD component that ameliorate or minimize the impact on the environment; and

E2.5.4.4. The actions known to have been taken or to be planned by the government of any participating and affected foreign nations that will affect environmental considerations.

E2.5.5. Distribution. Except as provided under "Limitations," (subsection E2.5.6. below), and except where classified information is

involved, environmental reviews will be made available to the Department of State, the CEQ, other interested Federal agencies, and, on request, the public in the United States. Interested foreign governments also may be informed of the reviews and, subject to the "Limitations" (subsection E2.5.6. below) and controls on classified information, will be furnished copies of the documents on request. This provision for document distribution is not a requirement that distribution be made prior to taking the action that is the subject of the review.

E2.5.6. Limitations. The requirements with respect to the preparation, content, and distribution of environmental reviews in the international context must remain flexible. The specific procedures must be determined on a case-by-case basis and may be modified where necessary to:

E2.5.6.1. Enable the component to act promptly. Considerations such as national security and foreign government involvement may require prompt action that must take precedence in the environmental review process;

E2.5.6.2. Avoid adverse impacts on relations between the United States and foreign governments and international organizations; and

E2.5.6.3. Avoid infringement or the appearance of infringement on the sovereign responsibilities of another government. The collection of information and the preparation and distribution of environmental documentation for actions in which another nation is involved or with respect to the environment and resources of another nation, unless done with proper regard to the sovereign authority of that nation, may be viewed by that nation as an interference in its internal affairs and its prerogative to evaluate requirements with respect to the environment.

E2.5.6.4. Ensure consideration of:

E2.5.6.4.1. Requirements of governmental confidentiality. This refers to the need to protect sensitive foreign affairs information and information received from another government with the understanding that it will be protected from disclosure regardless of its classification;

E2.5.6.4.2. National security requirements. This refers to the protection of classified information;

E2.5.6.4.3. Availability of meaningful information. Information on the environment of foreign nations may be unavailable, incomplete, or not susceptible to meaningful evaluation, and this may reduce or change substantially the normal content of the environmental review;

E2.5.6.4.4. The extent of the participation of the DoD component concerned and its ability to affect the decision made. The utility of the environmental analysis and the need for an in-depth review diminishes as the role of the DOD and control over the decision lessens; and

E2.5.6.4.5. International commercial, commercial confidentiality, competitive, and export promotion factors. This refers to the requirement to

protect domestic and foreign trade secrets and confidential business information from disclosure. Export promotion factors include the concept of not unnecessarily hindering United States exports.

E2.5.7. Classified Information. Classified information will be safeguarded from disclosure in accordance with the DoD procedures (DoD Directive 5200.1) established for such information under E.O. 12065. The requirements of that E.O. take precedence over any requirement of disclosure in this directive.

APPENDIX N

INSTALLATION PEST MANAGEMENT (IPM) PLANS

1. DOD PEST MANAGEMENT PLAN. Each installation must have a pest management plan as described in enclosure 6 of reference (a). The plan must list all program objectives, arranged in order of priority, according to potential or actual impact on health, morale, structures, material, or property. Installations that have more than 0.5 productive work-years of pest management work must have their own plan. Installations with less than 0.5 productive work-years must have an individual plan, or be included in a supporting installation's pest management plan. Professional pest management personnel or certified pesticide applicators must manage these installation programs.

2. CONTENT. Pest management plans must be comprehensive, long-range narrative documents, as outlined in enclosure 8 of reference (a), and must:

a. Describe all installation and satellite installation pest management requirements and programs, including those for contracts, natural resources, golf courses, and out leases, and identify minimum pest management staffing requirements.

b. Describe all IPM procedures required to monitor and control pests on the installation.

c. Describe all IPM procedures for surveillance and control of disease vectors.

d. Identify all resources, such as work-years, facilities, and equipment, required to support the installation pest management program.

e. Identify all pesticides, including EPA registration numbers, approved by the respective component PMC for use in the installation pest management program.

f. Describe all health and safety measures that will be taken to protect both pest management personnel and the general public from pesticide exposure and risk.

g. Identify any planned measures to comply with DOD Memoranda of Agreement with state pesticide regulatory offices relating to use or application of pesticides.

h. Describe pest management functions that can be done more economically through commercial contracts and provide or reference cost comparison analyses.

i. Describe any pest management operation with special environmental considerations such as those that:

(1) Use a restricted-use pesticide.

(2) Use any pesticide application that may contaminate surface water or groundwater.

(3) Include 259 or more contiguous hectares (640 acres) in one pesticide operation.

(4) May adversely affect endangered or other protected species or their habitats.

(5) Involve aerial application of pesticides.

(6) Involve management or control of designated noxious weeds in accordance with reference (b) in cooperation with local control efforts.

(7) Involve permits for the use of experimental-use pesticides.

j. Identify animal control efforts for feral cats, feral dogs, or wildlife.

k. Identify active or potential vector-borne diseases and describe medical department collaboration with local and state agencies or host nations for vector surveillance and control matters.

l. Identify golf course pest management operations.

REFERENCES

- (a) DOD Instruction 4150.7, "DOD Pest Management Program," May 29, 2008
- (b) 7 U.S.C. 2814

APPENDIX O

PEST MANAGEMENT PERSONNEL  
TRAINING AND CERTIFICATION REQUIREMENTS

a. PERSONNEL QUALIFICATIONS. Installation pest management programs are comprehensive and include all pest management operations on an installation to support facilities engineering, non-appropriated funds, leased or out-leased activities, contract operations, material resources, etc. Therefore, the installation pest management coordinator must have an appropriate position, educational background, and management skills to implement the plan for the installation commander. Pesticide applicators must meet the job qualification standards specified by the Office of Personnel Management. Outside of the United States, Marine Corps pesticide applicators must comply with the reference (a) DOD OEBGD or the FGS.

2. TRAINING AND CERTIFICATION. All installation pest management personnel who apply or supervise the application of pesticides must be trained and certified within two years of employment in accordance with reference (b), authorized by reference (c), or an EPA-approved state certification plan. Personnel who are undergoing apprenticeship training, but are not yet certified, must apply pesticides only under the direct supervision of a certified pesticide applicator.

a. IPM and pesticide application requirements may vary with installation mission, location, size, and environmental considerations. Some installations may have unique requirements. Training requirements for individual pesticide applicators may vary due to the pest management categories and complexity of the work to be performed. Therefore, the Marine Corps' senior PMC must determine the training and experience necessary to perform the pest management activities within their areas of responsibility. The minimum training for Marine Corps installation pesticide applicators or contractors must be that required by EPA for certification in the applicable pesticide application categories. However, additional training beyond certification may be required due to the circumstances at a particular installation or the nature of the work to be done. These additional pest management training requirements may be fulfilled by successful completion of any DOD; other Federal agency; or state, local, or private pest management training, provided the specific DOD requirements would be satisfied by the training.

b. Both DOD-certified and state-certified pesticide applicators must be recertified every three years in accordance with reference (b), authorized by reference (c) and reference (d), respectively. Designated Marine Corps certifying officials may administratively extend individual certifications for up to six months for cause.

c. Contractor employees performing pest management work on a Marine Corps installation must be certified prior to the beginning of the contract under a state plan accepted in the state in which the work is performed. The contractor must provide evidence of certification in all appropriate pest management categories. Additionally, the contractor must provide evidence of training and experience equivalent to that determined by the Marine Corps as

necessary to satisfy the performance requirements for the particular pest management function to be contracted. Successful bidders for contracts must be afforded the opportunity to receive initial DOD pest management training on a space-available basis at the contractor's expense.

d. Pest Control Performance Assessment Representatives (PCPARs) trained in pest management must monitor and evaluate contractor performance for pest management services, unless a DOD employee, certified in accordance with reference (b), authorized by reference (c), is available to assist the PCPAR. If an installation's pest management contract efforts are less than 0.25 work-year, the presence of a trained PCPAR at the installation is recommended, but is not mandatory.

e. Installations must encourage all eligible professional pest management personnel to obtain appropriate certification in accordance with reference (b), authorized by reference (c) and reference (d) and to obtain certification from applicable professional boards and professional certifying organizations. Professional pest management personnel must be certified if their duties include:

(1) Making recommendations for the use of pesticides applying pesticides, or directly supervising the application of pesticides.

(2) Conducting demonstrations on the proper use and techniques of pesticide application or the supervision of such demonstrations.

(3). Conducting field research that includes using or supervising the use of pesticides.

f. Marine Corps personnel and family members who apply pesticides under Marine Corps installation self-help programs or for their own relief are exempted from the certification requirement. Requirements for operational and deployable military personnel are described in chapter 14 of this Manual.

REFERENCES

- (a) DOD Overseas Environmental Baseline Guidance Document
- (b) DOD Directive 4150.07-M, Volume 1 "DOD Pest Management Training: DOD Plan for the Certification of Pesticide Applicators," December 12, 2008
- (c) DOD Instruction 4150.7, "DOD Pest Management Program," May 29, 2008
- (d) 7 U.S.C. 136 *et seq.*

APPENDIX (P)

MINIMUM REQUIREMENTS FOR UNDERGROUND STORAGE TANKS

1. GENERAL. The following information concerning UST requirements was adopted from a document published by the EPA Office of UST in August 1988. It includes minimum requirements and important deadlines.

2. WHAT DO YOU HAVE TO DO?

<b>Table P-1.--LEAK DETECTION</b>	
<b>NEW TANKS +</b> <b>reference (a),</b> <b>part 41(a)(1)</b> Three choices	1. Monthly monitoring* 2. Monthly inventory control & tightness test every 5 years 3. Monthly manual tank gauging & tightness test every 5 years (only for tanks holding 2,000 gallons or less); (Can use tightness test methods for only 10 years after installation or upgrading.)
<b>EXISTING TANKS<sup>++</sup></b> <b>reference (a),</b> <b>part 41(a)(2)</b> Two choices	1. Monthly monitoring* 2. Monthly inventory control & annual tightness test (Can use tightness test methods only until 1998 when tank must be upgraded or permanently closed. If upgraded, follow requirements for new tanks.)
<b>ALL TANKS WITH CAPACITIES OF 550 GALLONS OR LESS</b> <b>reference (a),</b> <b>part 41(a)(3)</b> Two choices	1. Methods listed above 2. Weekly manual tank gauging
<b>NEW &amp; EXISTING PRESSURIZED PIPING</b> <b>reference (a),</b> <b>part 41(b)(1)</b> One choice from each set	1. Automatic flow restrictor 2. Automatic shutoff device 3. Continuous alarm and 1. Annual line tightness test 2. Applicable monthly monitoring*

<b>Table P-1.--LEAK DETECTION--</b>	
<b>Continued</b>	
<b>NEW &amp; EXISTING SUCTION PIPING</b> <b>Reference (a),</b> <b>part 41(b)(2)</b> Three choices	1. Line tightness test every 3 years 2. Applicable monthly monitoring 3. None if: a. Piping sloped back to tank b. Only one check valve present just below pump c. Piping operates at below atmospheric pressure

Table P-2.--CORROSION PROTECTION	
<b>NEW TANKS</b> Reference (a), part 20 (a) Three choices	1. Coated & cathodically protected steel 2. Fiberglass-reinforced plastic 3. Steel-fiberglass-reinforced plastic composite
<b>EXISTING TANKS</b> reference (a), part 21 (b) Three choices	1. Add interior liner with periodic inspections 2. Add cathodic protection system after proving tank is tight and not corroded 3. Add interior liner & cathodic protection system
<b>NEW PIPING</b> Reference (a), part 20 (b) Three choices	1. Coated & cathodically protected steel 2. Fiberglass-reinforced plastic 3. Piping approved by the regulatory agency
<b>EXISTING PIPING</b> Reference (a), part 21 (c) Two choices	1. Upgrade to new piping standards 2. Add cathodic protection system

Table P-3.--SPILL/OVERFILL PREVENTION	
<b>ALL TANKS**</b> Reference (a), part 20 (c) and part 21 (d) One choice from each set	1. Spill catchment basin and 1. Automatic shutoff device (approved by the regulatory agency) 2. Overfill alarm 3. Ball float valve

\* Monthly tank gauging (part 43(d) through (h) of reference (a)) includes:  
Automatic monitoring  
Vapor monitoring  
Interstitial monitoring  
Groundwater monitoring  
Other approved methods

+ New tanks are those installed after December 1988

++ Existing tanks are those installed before December 1988

\*\* Spill/overflow prevention devices are not required for tanks filled by transfer of 25 gallons or less.

3. WHEN DO YOU HAVE TO ACT?

Table P-4.--IMPORTANT DEADLINES			
TYPE OF TANK AND PIPING	LEAK DETECTION Reference (a), part 40	CORROSION PROTECTION Reference (a), part 21	SPILL/OVERFLOW PREVENTION Reference (a), part 21
New Tanks and Piping*	At Installation of System	At Installation of System	At Installation of System
Existing tanks installed: Before 1965 or unknown	December 1989	December 1998	December 1998

1965-1969	December 1990	December 1998	December 1998
1970-1974	December 1991	December 1998	December 1998
1975-1979	December 1992	December 1998	December 1998
1980-1988	December 1993	December 1998	December 1998
Existing piping** Pressurized/ suction	December 1990 Same as existing tanks	December 1998 December 1998	Does not apply Does not apply

\* New tanks and piping are those installed after December 1988

\*\* Existing tanks and piping are those installed before December 1988

REFERENCES

(a) 40 CFR 280

APPENDIX Q

RELEASE REPORTING REQUIREMENTS

1. RELEASE REPORTING REQUIREMENTS. All confirmed leaks, suspected leaks based on monitoring, or spills or overfills of fuels exceeding 25 gallons must be reported to the EPA or proper state agency within 24 hours. All spills or leaks of any size must be contained and cleaned up.
2. RELEASE INVESTIGATION AND CONFIRMATION. Immediate investigation using the following methods (or methods specified by the state EPA):
  - a. Inventory check.
  - b. Tank or pipeline isolation and monitoring system recheck.
  - c. If a leak is still suspected, a tightness or hydrostatic test must be used to locate the leak.
  - d. If the system fails a tightness test, soil coring or groundwater sampling should be conducted.
  - e. When conducting an evaluation of immediate risk to drinking water, explosive vapors, etc., the IR program method or an updated risk assessment method should be used.
  - e. Reporting of investigation results to the implementing agency.
3. A separate set of corrective actions is required for petroleum products versus hazardous substances. The procedures are listed in reference (a), but will vary based on state requirements and risk.
4. Small leaks can be cleaned up without removing the tank or pipeline. Often, even if loose joints and connections are causing the small leaks, the general condition of the tank is still good. In such cases, the tank or pipeline must be repaired in accordance with 40 CFR 280.33 and the UST upgraded to meet new tank standards.

REFERENCES

(a) 40 CFR 280.60-67

APPENDIX R

UNDERGROUND STORAGE TANKS  
OPTIONS FOR RELEASE DETECTION

1. INTRODUCTION

a. The most immediate and demanding requirements of reference (a) concern the release-detection methods that must be implemented or installed on the Marine Corps UST systems. A synopsis of parts 40-45 of reference (a) follows.

b. The type of release-detection method used will vary with the type and age of the tank or pipeline. Furthermore, USTs used to store fuel for emergency generators are deferred from meeting the requirements for release detection. Emergency generator fuel tanks must comply with all other parts of this requirement.

2. RELEASE DETECTION FOR TANKS

a. Option 1-Combination of Precise Inventory Control and Tightness Testing. If USTs meet the new tank standards in part 20 of reference (a), operators must conduct monthly inventory control and a tightness test every five years until 1998 or 10 years after upgrading.

b. Option 2-Combination of Precise Inventory Control and an Automated Gauging Device. The automatic gauging device must be able to detect a leak of 0.2 gallon/hour.

c. Option 3-Vapor Monitoring in Soils Surrounding Tanks. These monitoring requirements include:

- (1) Only in sandy and gravelly soils.
- (2) Monthly soil gas sampling.
- (3) Must detect vapors above background levels.
- (4) Groundwater must not impede monitoring.
- (5) Sufficient number of vapor monitoring wells.

d. Option 4-Groundwater Monitoring Near Tanks. Monitoring requirements include:

- (1) Stored liquid must be immiscible in water and have a specific gravity less than one.
- (2) Groundwater must be within 20 feet of the ground surface.
- (3) Soils must have a hydraulic conductivity of 0.01 cm/second or greater.
- (4) Proper monitoring well design and proper number of wells, and

(5) Use of an automatic or manual method capable of detecting a 1/8-inch layer of floating fuel.

e. Option 5-Interstitial Monitoring. This method applies only to USTs surrounded by a secondary containment barrier. Monitoring wells must be placed between the primary tank and the containment barrier when the barrier is within the excavation zone. For double walled tanks and tanks fitted with internal liners ("bladders"), the interstitial space must be monitored.

f. Option 6-Another Method Approved by the Implementing Agency. The method must be able to detect a 0.2 gallon/hour leak or 150 gallons/month release with a 95 percent probability of detection and a 5 percent probability of false positives.

3. PIPING RELEASE MONITORING. EPA regulations place more stringent requirements on pipes that convey liquids under pressure. The following release detection requirements apply:

a. Pressurized Piping

(1) Must be equipped with automatic line leak detection (e.g., automatic flow restrictor, continuous alarm, or automatic shutoff capabilities).

(2) Must have annual tightness test or monthly monitoring system.

b. Suction Piping. Tightness test every three years or monthly monitoring. European suction piping requires no leak detection.

REFERENCES

(a) 40 CFR 280

APPENDIX S

UNDERGROUND STORAGE TANKS  
OUTLINE OF PERMANENT CLOSURE REPORT

- I. EXECUTIVE SUMMARY
- II. INTRODUCTION AND PURPOSE
  - a. Brief statement of report purpose and scope.
  - b. Identify contractors involved and UST owner/operators.
- III. SITE DESCRIPTION AND UST IDENTIFICATION
  - a. Identify and describe facility related to USTs and general setting.
  - b. Identify and describe USTs included in the report.
  - c. Scaled site drawings.
- IV. NOTIFICATION AND PERMITTING
  - a. Regulatory notification/permits.
  - b. Contractor certification/licensing.
- V. UST CLOSURE PROCEDURES
  - a. Residual liquid removal.
  - b. Tank/pipe cleaning and closure preparation.
  - c. Tank/pipe removal or in-place closure.
  - d. Excavated soil management.
  - e. Safety measures and considerations.
- VI. SITE ASSESSMENT PROCEDURES
  - a. Describe appropriate environmental conditions and factors.
  - b. Visual observations.
  - c. Field analyses and checks.
  - d. Soil/water sampling procedures and Quality Assurance/Quality Control (QA/QC).
  - e. Soil/water analytical procedures and QA/QC.
  - f. Results and conclusions of site assessment.
- VII. NECESSARY ATTACHMENTS AND APPENDICES
  - a. Contractor certifications and licenses.
  - b. Residual fuel disposal/reuse receipts.
  - c. Tank sludge disposal manifests or receipts.
  - d. Tank washwater disposal manifests or receipts.
  - e. Contaminated soil manifests or receipts.
  - f. UST disposal receipts/certificates of destruction.
  - g. Photographs of site work and conditions.
  - h. Laboratory chain-of-custody forms.
  - i. Laboratory analytical results.
  - j. Removal notifications and permits.
  - k. Related correspondence to/from regulators.
  - l. Well permits, if wells installed.
  - m. Drill cuttings and purged well water manifests, if needed.

APPENDIX T

ACRONYM LIST

ACAT..... Acquisition Category  
ACBM..... Asbestos Containing Building Materials  
ACHP..... Advisory Council on Historic Preservation  
ACP..... Area Contingency Plan  
AEA..... Atomic Energy Act  
AFPMB..... Armed Forces Pest Management Board  
AFV..... Alternative fuel vehicles  
AICUZ..... Air Installations Compatible Use Zone  
AIRS..... Automated Inspection Reporting System  
AMFA..... Alternative Motor Fuels Act  
AL..... Action Level  
ALU..... Army Logistics University  
AMCL..... Alternative Maximum Contaminant Level  
AOC..... Areas of Concern  
APE..... Area of Potential Effect  
AQD..... Air Quality District  
AR..... Administrative Record  
AQCRs..... Air Quality Control Regions  
ARARs..... Applicable or Relevant and Appropriate Requirements  
ARPA..... Archaeological Resources Protection Act  
ASP..... Ammunition Supply Point  
ASR..... Archive Search Report  
ATSDR..... Agency for Toxic Substance and Disease Registry  
AUL..... Authorized Use List

BACM..... Best Available Control Measures  
BACT..... Best Available Control Technology  
BASH..... Bird Aircraft Strike Hazards  
BCT..... BRAC Cleanup Team  
BLM..... Bureau of Land Management  
BMP..... Best Management Practice  
BNA..... By Name Assignment  
BR..... Budget Review  
BRAC..... Base Realignment and Closure  
BSO..... Budget Submitting Office

C&D..... Construction and demolition  
CAA..... Clean Air Act  
CAF..... Contract Advertisement Forecasts  
CATEX..... Categorical Exclusion  
CCR..... Consumer Confidence Report  
CE..... Conditional Exemption  
CECOS..... Civil Engineering Corps of Officers School  
CEQ..... Council on Environmental Quality  
CERCLA..... Comprehensive Environmental Response, Compensation and  
Liability Act  
CERFA..... Community Environmental Response Facilitation Act  
CESQG..... Conditionally Exempt Small Quantity Generator

CETEP..... Comprehensive Environmental Training and Education Program  
CFR..... Code of Federal Regulations  
CG..... Commanding General  
CG/CO..... Commanding General/Commanding Officer  
CGIP..... Commanding General's Inspection Program  
cm<sup>2</sup>..... Centimeter Squared  
CMC..... Commandant of the Marine Corps  
CMC (CL)..... Counsel for the Commandant of the Marine Corps  
CMC (LF)..... Commandant of the Marine Corps, Facilities and Services Division  
CMC (LFF)..... Commandant of the Marine Corps, Logistics Facilities Branch  
CMC (LP)..... Commandant of the Marine Corps, Logistics, Plans, Policies, and Strategic Mobility  
CMC (SD)..... Commandant of the Marine Corps, Safety Division  
CMEP..... Centrally-Managed Environmental Program  
CNO (N45)..... Director, Environmental Readiness Division  
CO..... Carbon monoxide  
CO..... Commanding Officer  
COMMARFORRES..... Commader, U.S. Marine Coprs Forces Reserve  
COMMARFORPAC..... Commander, U.S. Marine Corps Forces Pacific  
COMMARFORLANT..... Commander, U.S. Marine Corps Forces Atlantic  
COMNAVFACENCOM..... Commander, Naval Facilities Engineering Command  
CONUS..... Continental United States  
COTP..... Captain of the Port  
CRM..... Cultural Resources Manager  
CROP..... Consolidated Rules of Procedure  
CRP..... Community Relations Plan  
CWA..... Clean Water Act  
CWE..... Current Working Estimate  
CWS..... Community Water System  
CZMA..... Coastal Zone Management Act  
  
DBP..... Disinfection Byproducts  
D/DBP..... Disinfectants and DBPs  
DD..... Decision Document  
DDA..... Designated Disposition Authority  
DDESB..... DOD Explosives Safety Board  
DEIS..... Draft Environmental Impact Statement  
DENIX..... Defense Environmental Network and Information Exchange  
DERA..... Defense Environmental Restoration Account  
DERP..... Defense Environmental Restoration Program  
DLA..... Defense Logistics Agency  
DMM..... Discarded military munitions  
DOD..... Department of Defense  
DODI..... Department of Defense Instruction  
DOE..... Department of Energy  
DOI..... Department of Interior  
DOJ..... Department of Justice  
DON..... Department of the Navy  
DOT..... Department of Transportation

DRMO..... Defense Reutilization and Marketing Office  
DRMS..... Defense Reutilization and Marketing Service

E.O..... Executive Order  
EA..... Environmental Assessment  
EAC..... Early Action Compact  
ECs..... Engineering Controls  
ECC..... Environmental Compliance Coordinator  
ECE..... Environmental Compliance Evaluation  
ECP..... Environmental Condition of Property  
ECPSOP..... Environmental Compliance and Protection  
Standard Operating Procedure  
EFD/EFA..... Engineering Field Division/Activity  
EHS..... Extremely Hazardous Substance  
EIRB..... Environmental Impact Review Board  
EIS..... Environmental Impact Statement  
EISA..... Energy Independence and Security Act of 2007  
EIT&S..... Environmental Information Technology and Services  
ELMS..... Environmental Learning Management System  
EM..... Environmental Management  
EMH..... Environmental Management Hierarchy  
EMS..... Environmental Management System  
EOD..... Explosives Ordnance Disposal  
EPA..... United States Environmental Protection Agency  
EPACT..... Energy Policy Act of 1992  
EPCRA..... Emergency Planning and Community Right-to-Know Act  
EPR Portal..... Environmental Portal  
ER..... Environmental Restoration  
ER,N..... Environmental Restoration, Navy  
ERC..... Emission Reduction Credit  
ERP..... Emergency response plan  
ESA..... Endangered Species Act  
ESOH..... Environmental, safety, and occupational health  
ESWTR..... Enhanced Surface Water Treatment Rule  
ETS..... Endangered and Threatened Species

F&ES..... Fire and Emergency Services  
FAA..... Federal Aviation Administration  
FBRR..... Filter Backwash Recycling Rule  
FEC..... Facility Emergency Coordinator  
FFA..... Federal Facility Agreement  
FFCA..... Federal Facility Compliance Act  
FFSRA..... Federal Facility State Remediation Agreement  
FGS..... Final Governing Standards  
FI..... Facilities Integration  
FIFRA..... Federal Insecticide, Fungicide, and Rodenticide Act  
FIP..... Federal Implementation Plan  
FMF..... Fleet Marine Force  
FNSI..... Finding of No Significant Impact  
FOIA..... Freedom of Information Act  
FOSL..... Finding of Suitability for Lease  
FOST..... Finding of Suitability for Transfer  
FOTW..... Federally Owned Treatment Works

FPO..... Federal Preservation Officer  
FPAS..... Federal Property and Administrative Services Act  
FSRM..... Facilities Sustainment, Repair, and Modernization  
FRP..... Facility Response Plan  
FRT..... Facility Response Training  
FS..... Feasibility Study  
FUDS..... Formerly Used Defense Site  
FWCA..... Fish and Wildlife Conservation Act  
FWPCA..... Federal Water Pollution Control Act  
FY..... Fiscal Year

GHG..... Greenhouse Gas  
GIS..... Geographic Information System  
GME..... Garrison Mobile Equipment  
GOCO..... Government Owned-Contractor Operated Facilities  
GP..... Green Procurement  
GPC..... Government Purchase Card  
GWR..... Ground Water Rule  
GWUDI..... Ground Water under the direct influence

HAA5..... Haloacetic acids  
HAP..... Hazardous air pollutants  
HAZMAT..... Hazardous Material  
HAZWOPER..... Hazardous Waste Operations and Emergency  
Response  
HC..... Hazardous chemical  
HCP..... Hazardous Materials Consolidation Program  
HEAP..... Headquarters Environmental Applications Portal  
HM..... Hazardous Material  
HMTA..... Hazardous Materials Transportation Act  
HMTUSA..... Hazardous Materials Transportation Uniform Safety Act  
HQ..... Headquarters  
HQEIRB..... Headquarters Environmental Impact Review Board  
HQMC..... Headquarters, Marine Corps  
HRS..... Hazard Ranking System  
HS..... Hazardous Substance  
HSWA..... Hazardous and Solid Waste Amendments  
HVAC..... Heating, ventilation, air conditioning  
HW..... Hazardous Waste  
HWAR..... Hazardous Waste Annual Report  
HWMP..... Hazardous Waste Management Plan

I&L..... Headquarters Marine Corps Installations and Logistics  
IAG..... Interagency Agreement  
IC..... Institutional Controls  
ICP..... Integrated Contingency Plan  
ICRMP..... Integrated Cultural Resources Management Plan  
ICS..... Incident Command System  
IESWTR..... Interim Enhanced Surface Water Treatment Rule  
IGMC..... Inspector General of the Marine Corps  
I/M..... Inspection and Maintenance  
iNFADS..... Internet Navy Facilities Assets Data Store  
INRMP..... Integrated Natural Resources Management Plan

IPM..... Integrated Pest Management  
IPMP..... Integrated Pest Management Plan  
IR..... Installation Restoration  
ISEERB..... Interservice Environmental Education Review Board  
ISO..... International Organization for Standardization  
ISSA..... Intra (or Inter)-Service Support Agreement  
ISWM..... Integrated Solid Waste Management  
ISWMH..... Integrated Solid Waste Management Hierarchy  
IT..... Information Technology  
ITS ..... Individual Training Standards  
IUCN..... International Union for Conservation of Nature  
IWTP..... Industrial Waste Treatment Plant

JDOMS..... Joint Director of Military Support  
JEGS..... Japan Environmental Governing Standards

K..... Thousand  
Kg..... Kilogram

LAER..... Lowest Achievable Emission Rate  
LCR..... Lead and Copper Rule  
LDR..... Land Disposal Restriction  
LEPC..... Local Emergency Planning Committee  
LF..... Facilities and Services Division  
LFF..... Logistics Facilities Branch  
LHVC..... Large High Voltage Capacitor  
LLMW..... Low-Level Mixed Waste  
LLVC..... Large Low Voltage Capacitor  
LID..... Low Impact Development  
LQG..... Large Quantity Generators  
LTMgt..... Long-term Management  
LUC..... Land use controls

µg/L..... microgram per liter  
M..... Million  
M1/M2..... Locally Managed Funds for Environmental Minor Repair and  
Construction  
MACT..... Maximum Achievable Control Technology  
MARCORLOGCOM..... Marine Corps Logistics Command  
MARCORSYSCOM..... Marine Corps Systems Command  
MARFORRES..... Marine Corps Forces Reserve  
MBTA..... Migratory Bird Treaty Act  
MC..... Munitions constituent  
MCCDC..... Marine Corps Combat Development Command  
MCEASE..... Marine Corps Environmental Applications and Systems  
Enterprise  
MCI..... Marine Corps Installations  
MCICOM..... Marine Corps Installations Command  
MCL..... Maximum Contaminant Level  
MCLB..... Marine Corps Logistics Base  
MCLG..... Maximum Contaminant Level Goal  
MCO..... Marine Corps Order  
MCOTW..... Marine Corps Owned Treatment Works

MDAS..... Material Documented as Safe  
MDEH..... Material Documented as an Explosive Hazard  
MEC..... Munitions and explosives of concern  
Mg..... Milligram  
Mg/L..... Milligrams per Liter  
MILCON..... Military Construction  
MLI..... Munitions List Items  
MMM..... Multimedia Mitigation  
MMPA..... Marine Mammal Protection Act  
MMRP..... Military Munitions Response Program  
MMS..... Minerals Management Service  
MOA..... Memorandum of Agreement  
MOS..... Military Occupational Specialty  
MOU..... Memorandum of Understanding  
MPPEH ..... Material Potentially Presenting an Explosive Hazard  
MPRSA..... Marine Protection, Research and Sanctuaries Act  
MR ..... Military Munitions Rule  
MRDL..... Maximum Residual Disinfectant Levels  
MRDLG..... Maximum Residual Disinfectant Level Goal  
MRP..... Munitions Response Program  
MRS ..... Munitions response sites  
MS4s..... Municipal separate storm sewer systems  
MSDS..... Material Safety Data Sheet  
MSWLF..... Municipal Solid Waste Landfill  
MTP..... Maintenance and Treatment Plan  
  
NA..... Not Applicable  
NAAQS..... National Ambient Air Quality Standards  
NAGPRA..... Native American Grave Protection and Repatriation Act  
NAVFAC..... Naval Facilities Engineering Command  
NAVRAMP..... Navy Radon Assessment and Mitigation Program  
NCP..... National Contingency Plan (National Oil and  
Hazardous Substance Pollution Contingency Plan)  
NDAA..... National Defense Authorization Act  
NEPA..... National Environmental Policy Act  
NESHAP..... National Emission Standards for Hazardous Air  
Pollutants  
NFESC..... Naval Facilities Engineering Services Center  
NFA..... No Further Action  
NFPA..... National Fire Protection Association  
NFRAP..... No Further Response Action Planned  
NHL..... National Historic Landmark  
NHO..... Native Hawaiian Organizations  
NHPA..... National Historic Preservation Act  
NIFC..... National Inter-Agency Fire Center  
NIMS..... National Incident Management System  
NMCPH..... Navy Marine Corps Public Health Center  
NO<sub>2</sub>..... Nitrogen dioxide  
NO<sub>x</sub>..... Nitrogen oxides  
NOA..... Notice of the Availability  
NOAA..... National Oceanic and Atmospheric Administration  
NOI..... Notice of Intent  
NORTHCOM..... United States Northern Command

NOV..... Notice of Violation  
NPDES..... National Pollutant Discharge Elimination System  
NPDWR..... National Primary Drinking Water Regulations  
NPL..... National Priorities List  
NPS..... National Park Service  
NRC..... National Response Center  
NRDA..... Natural Resource Damage Assessment  
NRHP..... National Register of Historic Places  
NRT..... National Response Team  
NSDWR..... National Secondary Drinking Water Regulations  
NSE..... National Security Exemption  
NSPS ..... New Source Performance Standards  
NSR..... New Source Review  
NTNCWS..... Nontransient, Noncommunity Water System  
NWCF..... Naval Working Capital Fund  
NWCG..... National Wildfire Coordinating Group  
  
OASN (E,I&E)..... Office of the Assistant Secretary of the Navy for  
Energy, Installations and Environment  
OCCFLD..... Marine Corps occupational field  
OCONUS..... Outside the Continental United States  
ODS..... Ozone Depleting Substance  
OEBGD..... Overseas Environmental Baseline Guidance Document  
OHS..... Oil or Hazardous Substance  
OHSSCPs..... Oil and Hazardous Substance Spill Contingency Plans  
O&M,MC..... Operation and Maintenance, Marine Corps  
O&M,MCR..... Operation and Maintenance, Marine Corps Reserves  
OM,N..... Operation and Maintenance, Navy  
OOD/CDO..... Officer of the Day/Command Duty Officer  
OPA..... Oil Pollution Act of 1990  
OPBUD..... Operating Budget  
OPS..... Operational Plan Submission  
OSC..... On-Scene Coordinator  
OSCDR..... On-Scene Commander  
OSD..... Office of the Secretary of Defense  
OSHA..... Occupational Safety and Health Administration  
OSOT..... On-Scene Operations Team  
OSRP..... Oil Spill Response Program  
O&T..... Operations and Training  
OTO..... Other than Operational  
OU..... Operable Unit  
  
P2..... Pollution Prevention  
P2ADS..... Pollution Prevention Annual Data Summary  
PA..... Programmatic Agreement  
PA/SI..... Preliminary Assessment/Site Inspection  
Pb..... Lead  
PCB..... Polychlorinated biphenyl  
pCi/L..... Picocurie per liter  
PCPAR..... Pest Control Performance Assessment Representatives  
PE..... Professional engineer  
PM..... Particulate Matter  
PMC..... Pest Management Consultant

PMO ..... Program Management Office  
PMPAR..... Pest Management Performance Assessment Representatives  
PNR..... Public Notification Rule  
POA&M..... Plan of Action and Milestones  
POC..... Point of Contact  
POL..... Petroleum, Oil, and Lubricants  
POM..... Program Objective Memorandum  
POTW..... Publicly Owned Treatment Works  
PPA..... Pollution Prevention Act  
Ppb..... Parts per billion  
PPBE..... Planning, Programming, Budget and Execution  
PPE..... Personal Protective Equipment  
PPI..... POM Preparation Instruction  
Ppm..... Parts per million  
PPOA..... Pollution Prevention Opportunity Assessment  
PPV..... Public-Private Venture  
PRA..... Preliminary Range Assessment  
PRP..... Potentially Responsible Party  
PSD..... Prevention of Significant Deterioration  
psia..... Pounds Per Square Inch Absolute  
PTE..... Potential to Emit  
PWS..... Public Water System

QRP..... Qualified Recycling Program

R1/R2..... Locally Managed Funds for Minor Construction  
R3..... Resource, Recovery, and Recycling  
RA..... Remedial Action  
RAB..... Restoration Advisory Board  
RA-C..... Remedial Action-Construction  
RAICUZ..... Range Air Installations Compatible Use Zone  
RACM..... Regulated Asbestos-Containing Material  
RACR..... Remedial Action Completion Report  
RACT..... Reasonably Available Control Technology  
RA-O..... Remedial Action-Operations  
RC..... Response Complete  
RD..... Remedial Design  
RCRA..... Resource Conservation and Recovery Act  
RCZs..... Range Compatibility Zones  
RDT&E..... Research, Development, Test, and Evaluation  
REC..... Regional Environmental Coordinator  
REIR..... Request for Environmental Impact Review  
RI/FS..... Remedial Investigation/Feasibility Study  
RIP..... Remedy in Place  
RMP..... Risk Management Plans  
ROD..... Record of Decision  
RPM..... Remedial Project Manager  
RQ..... Reportable Quantity  
RRT..... Regional Response Team  
RSPA..... U.S. Department of Transportation Research and Special  
                  Programs Administration

SABRS..... Standard Accounting, Budgeting and Reporting System

SARA..... Superfund Amendments and Reauthorization Act  
SAT..... Marine Corps Systems Approach to Training  
SC..... Site Closeout  
SDWA..... Safe Drinking Water Act  
SECDEF..... Secretary of Defense  
SECNAV..... Secretary of the Navy  
SECNAVINST..... SECNAV Instruction  
SEIS..... Supplemental Environmental Impact Statement  
SERC..... State Emergency Response Commission  
SES..... Senior Executive Service  
SHPO..... State Historic Preservation Office  
SI..... Site Inspection  
SIP..... State Implementation Plan  
SLI..... Strategic List Item  
SNC..... Significant Non-Compliance  
SO<sub>2</sub>..... Sulfur dioxide  
SOFA..... Status of Forces Agreement  
SOP..... Standard Operating Procedure  
SPCC..... Spill Prevention Control and Countermeasure  
SQGs..... Small Quantity Generators  
SSIC..... Standard Subject Identification Code  
SSPP..... Strategic Sustainability Performance Plan  
SSSP..... Site Specific Spill Plans  
SW..... Solid Waste  
SWAP..... Source Water Assessment Programs  
SWDA..... Solid Waste Disposal Act  
SWMU..... Solid Waste Management Unit  
SWP..... Source Water Protection  
SWPPP..... Stormwater Pollution Prevention Plan  
SWTR..... Surface Water Treatment Rule  
  
TCA..... 1,1,1-Trichloroethane  
TCR..... Total Coliform Rule  
TDY..... Temporary Duty  
TECOM..... Training and Education Command  
THPO..... Tribal Historic Preservation Office  
TNCWS..... Transient Noncommunity Water System  
TOC..... Total Organic Carbon  
TPQ..... Threshold Planning Quantity  
TPY..... Tons per year  
TRC..... Technical Review Committee  
TRI..... Toxic Release Inventory  
TSCA..... Toxic Substances Control Act  
TSDF..... Treatment, Storage and/or Disposal Facility  
TT..... Treatment Technique  
TTHM..... Total Trihalomethanes  
  
U.S..... United States  
U.S.C..... United States Code  
UCMR..... Unregulated Contaminant Monitoring Rule  
UEC..... Unit Environmental Coordinator  
UIC..... Underground Injection Control  
USACE..... U.S. Army Corps of Engineers

USDA..... U.S. Department of Agriculture  
USFWS..... U.S. Fish and Wildlife Service  
UST..... Underground Storage Tank  
UV..... Ultraviolet Light  
UXO..... Unexploded Ordnance

VA..... Vulnerability Assessment  
VOC..... Volatile Organic Compound

WEBCASS..... Web-Based Compliance Assistance and Sustainment Software  
WFMP..... Wildland Fire Management Plan  
WHP..... Wellhead Protection  
WMM..... Waste Military Munition  
WQA..... Water Quality Act  
WQM..... Water Quality Management

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